

Wittgenstein's Tractatus Logico-Philosophicus  
and the picture theory of meaning.

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## Introduction.

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## Introduction.

### The historical position of the Tractatus.

In my opinion the Tractatus is a working out of the correspondence theory of meaning which occupied Russell in the first decade of this century. It is the brilliant mausoleum of a theory whose dominance will be traced in such work of Russell's as The Principles of Mathematics (1903), 'On denoting' (Mind, 1905), Philosophical Essays (1910) and The Problems of Philosophy (1912).

At the same time it is the herald of a revolution; its dogmatic ruling on language gives way to investigation.

' Red granite and black diorite, with  
the blue  
Of the labradorite crystals gleaming  
like precious stones  
In the light reflected from the snow;  
and behind them  
The eternal lightning of Lenin's bones.'

' The skeleton of the future: At Lenin's tomb ',  
by Hugh Macdiarmid.

The historical position of the Tractatus may be put, simply, as follows: Wittgenstein rigourously developes Russellian assumptions about language and judgment to the point at which they become quite unacceptable; in realising their unacceptability he developes his later philosophy. This is, admittedly, an over-simplification since it leaves out of account Moore, Frege and Hertz and suggests also that Wittgenstein added nothing of

his own. I would still claim that the principal assumption of the Tractatus is that meaning demands correspondence and that Russell's work, as given above, is the most important immediate ancestor of the Tractatus. A more exact description of the relation between these two philosophers will be attempted in this thesis, together with remarks on such other predecessors as Moore and Frege.

### The earlier and the later Wittgenstein.

It is generally agreed that Wittgenstein is one of the leading philosophers of the past half-century.

' There can be no serious doubt that the most powerful and pervasive influence upon the practice of philosophy in this country today has been that of Ludwig Wittgenstein.'

English Philosophy since 1900, p.62; G. J. Warnock.

' The influence of Wittgenstein on modern philosophy, particularly in the English-speaking countries, has been very great... Wittgenstein stands out as a great and original philosophical genius.'

The Concise Encyclopaedia of Western Philosophy and Philosophers, p.411; edited by J. C. Urmson.

His work falls into two periods, the ' earlier ' Wittgenstein and the ' later '. Two works, of the considerable corpus published, are taken to be characteristic of these periods, the Tractatus Logico-Philosophicus (first published in English in 1922) and the Philosophical Investigations (published posthumously



in 1953). of the role of the philosopher: it is not the philosopher's aim to produce a theory; he ought, rather,

' Wittgenstein's work as a philosopher divides clearly into two periods. The definitive account of his earlier views is contained in the Tractatus Logico-Philosophicus, written in 1914-18; he himself published no account of his later views, but we have an earlier version of them in the Blue and Brown Books which date from 1933-35, and a later version in the Philosophical Investigations, which contain his thoughts, from the mid-thirties until his death.'

The Concise Encyclopaedia, p.408.

However, the contrast between these two works, and therefore between the periods they typify, should not be allowed to obliterate the continuity of Wittgenstein's thought. Indeed, it is the continuity which gives richness and meaning to the contrast and helps us to understand Wittgenstein's antipathy to philosophy as a type of theory.

' 40031: All philosophy is a " critique of language "...'

Tractatus.

' Philosophy may in no way interfere with the actual use of language; it can in the end only describe it.'

Investigations, p.49e.

As these quotations reveal, Wittgenstein's preoccupation was with the nature of language. It is this, fundamentally, which endows his work with a continuous theme. A more striking feature of his philosophic identity is his

conception of the role of the philosopher: it is not the philosopher's aim to produce a theory; he ought, rather, to see that certain ' practical ' problems in the use of language are resolved. His task is, in some sense, seeing that people can speak, not in telling them what to say.

' 653: The correct method in philosophy would really be the following: to say nothing except what can be said, i.e. propositions of natural science - i.e. something that has nothing to do with philosophy - and then, whenever someone else wanted to say something metaphysical, to demonstrate to him that he had failed to give a meaning to certain signs in his propositions. Although it would not be satisfying to the other person - he would not have the feeling that we were teaching him philosophy - this method would be the only strictly correct one.

4112: Philosophy aims at the logical clarification of thoughts.

Philosophy is not a body of doctrine but an activity.

A philosophical work consists essentially of elucidations.

Philosophy does not result in ' philosophical propositions ', but rather in the clarification of propositions.

Without philosophy thoughts are, as it were, cloudy and indistinct: its task is to make them clear and to give them sharp boundaries.'

### Tractatus.

' 126: Philosophy simply puts everything before us, and neither explains nor deduces anything.- Since everything lies open to view there is nothing to explain. For what is hidden, for example, is of no interest to us.

One might also give the name  
 " philosophy " to what is possible  
before all new discoveries and  
inventions.'

Investigations, p.50e.

Philosophic activity is pre-theoretical. If it takes place at all, it does so before theorising can begin. The solution to a philosophical problem is not a theory, since the problem is, characteristically, an inability to make the proper use of language. This type of inability is removed by understanding how language really works.

So much for the continuity of Wittgenstein's thought. The discontinuity emerges most powerfully in the change in his conception of how language in fact does work. According to the early theory, linguistic meaning is a function of simple relationships operating at a level which stands to ordinary language in somewhat the same relation as the fundamental relationships described in physics stand to the everyday world. Accordingly, meaning in ordinary language depends on its reduction, through analysis, to a level of unanalysables out of which the complexes of language are variously constructed.

In his later philosophy, Wittgenstein rejects the atomic model. He also rejects the other half of the early theory, that meaning requires exact correspondence. The reductive and correspondence criteria are replaced by that

of ' use ' ; not that the use-criterion has no place in the Tractatus - ' 3328: If a sign is useless, it is meaningless.' The difference comes with the recognition that there are many things done with language, many uses for expressions, many different types and standard of performance.

On reductionism he has this to say:-

' When I say: " My broom is in the corner ", - is this really a statement about the broomstick and the brush? Well, it could at any rate be replaced by a statement giving the position of the stick and the position of the brush. And this statement is surely a further analysed form of the first one.- But why do I call it " further analysed "? - Well, if the broom is there, that surely means that the stick and brush must be there, and in a particular relation to one another; and this was as it were hidden in the sense of the first sentence, and is expressed in the analysed sentence. Then does someone who says that the broom is in the corner really mean: the broomstick is there, and so is the brush, and the broomstick is fixed in the brush? - If we were to ask anyone if he meant this he would probably say that he had not thought specially of the broomstick or specially of the brush at all. And that would be the right answer, for he meant to speak neither of the stick nor of the brush in particular. Suppose that, instead of saying " Bring me the broom ", you said " Bring me the broomstick and the brush which is fitted on to it."! - Isn't the answer: " Do you want the broom? Why do you put it so oddly?" Is he going to understand the further analysed sentence better? - This sentence, one might say, achieves the same as the ordinary one, but in a more roundabout way.-'

Investigations, p.29e.



The implication is that 'Bring me the broom' is just as useful as 'Bring me the broomstick and the brush which is fitted on to it' and therefore just as meaningful, even if one is an 'analysed' version of the other. Analysis does not necessarily increase understanding.

Wittgenstein does not have much to say explicitly against the correspondence theory of meaning, partly because in abandoning reductionism he repudiates the path from ordinary language to that level of meaning at which exact correspondence was thought to occur. Here is one of his comments on the inefficacy of correspondence theory:-

'I see a picture; it represents an old man walking up a steep path leaning on a stick.- How? Might it not have looked just the same if he had been sliding downhill in that position?.....

What is essential is to see that the same thing can come before our minds when we hear the word and the application still be different. Has it the same meaning both times? I think we shall say not.

141. Suppose, however, that not merely the picture of the cube, but also the method of projection comes before our mind? - How am I to imagine this? - Perhaps I see before me a schema shewing the method of projection: say a picture of two cubes connected by lines of projection. - But does this really get me any further? Can't I now imagine different applications of this schema too?'

Investigations, pps.54e & 55e.

In short, mere correspondence is insufficient to explain



the meaning of a picture, since the application of the picture can alter.

His main criticism of the correspondence theory of meaning is not brought to bear on the doctrine of logical form and picturing but on the theory of names and the correlative metaphysical theory of simples. According to the theory of names, meaning depends ultimately, though not wholly, on a set of expressions each of which is the name of some changeless and perfectly simple atom; and, further, every real name belongs to this set.

' We said that the sentence " Excalibur has a sharp blade " made sense even when Excalibur was broken in pieces. Now this is so because in this language-game a name is also used in the absence of its bearer.'

Investigations, p.21e.

' But,' says the Atomist,' that is precisely why " Excalibur " is not a real name.'

' ...if " Excalibur " is the name of an object, this object no longer exists when Excalibur is broken in pieces; and as no object would then correspond to the name it would have no meaning. But then the sentence " Excalibur has a sharp blade " would contain a word that had no meaning, and hence the sentence would be nonsense. But it does make sense; so there must always be something corresponding to the words of which it consists. So the word " Excalibur " must disappear when the sense is analysed and its place be taken by words which name simples. It will be

reasonable to call these words the real names.'

Op.cit., pps.19e & 20e.

Wittgenstein's reply is that 'Excalibur' is a name even if its bearer is physically complex, even if Excalibur actually disappears. That 'Excalibur' has meaning in being a name does not imply that its meaning is what it names or that its having meaning is its corresponding with its bearer.

And, in any case,

'...what are the simple constituent parts of which reality is composed? - What are the simple constituent parts of a chair? The bits of wood of which it is made? Or the molecules, or the atoms? - "simple" means: not composite. And here the point is: in what sense "composite"? It makes no sense at all to speak absolutely of the "simple parts of a chair".'

Op.cit., p.21e.

Wittgenstein rejects this form of the correspondence theory of meaning because certain expressions, names, do not fulfill the conditions of the theory; they do not correspond to simple, immutable atoms and if they do correspond to such things as swords and men, their having meaning is not explained by this correspondence.

The philosopher's persistence in trying to see all descriptive expressions in terms of names is just as

silly, Wittgenstein thinks, as his persistence in trying to see all names in terms of ' real ' names. Is ' man ' a name? Is ' game ' a name?

' Consider for example the proceedings that we call " games ". I mean board-games, card-games, ball-games, Olympic games and so on. What is common to them all? - Don't say: " There must be something common, or they would not be called " games " - but look and see whether there is anything common to all. - For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that.

...the result of this examination is: we see a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail.

67. I can think of no better expression to characterise these similarities than " family resemblances "; for the various resemblances between members of a family: build, features, colour of eyes, gait, temperament, etc. etc. overlap and criss-cross in the same way. - And I shall say: " games " form a family.'

Investigations, pps.31e & 32e.

' You think of " game " as the name of something that runs through games, as it were making them games? If you look at games you won't find any such thing.'

Wittgenstein relies again on the ' use ' criterion when he considers the claim that language can only have meaning if it has exact meaning.

' If I tell someone " Stand roughly

here " - may not this explanation work perfectly? And cannot every other one fail too?

But isn't it an inexact explanation? Yes; why shouldn't we call it " inexact "? Only let us understand what " inexact " means. For it does not mean " unusable ". And let us consider what we call an " exact " explanation in contrast with this one. Perhaps something like drawing a chalk line round an area? Here it strikes us at once that the line has breadth. So a colour-edge would be more exact. But has this exactness still got a function here: isn't the engine idling? And remember too that we have not yet defined what is to count as overstepping this exact boundary; how, with what instruments, it is to be established. And so on.

...No single ideal of exactness has been laid down; we do not know what we should be supposed to imagine under this head - unless you yourself lay down what is to be so called. But you will find it difficult to hit upon such a convention; at least any that satisfies you.'

Op.cit., pps.41e & 42e.

An important feature of these critical considerations of his early philosophy is Wittgenstein's reliance on observation. Our observation of how language actually works tells us that the Atomist theory of meaning is false.

Perhaps the first self-criticism of this sort is to be found in an address which he gave to the Aristotelian Society in 1929. He had said, in the Tractatus,

' 555: We now have to answer a priori



the question about all the possible forms of elementary propositions...

5551: Our fundamental principle is that whenever a question can be decided by logic at all it must be possible to decide it without more ado.

( And if we get into a position where we have to look at the world for an answer to such a problem, that shows that we are on a completely wrong track.) '

Tractatus.

Then, in his paper to the Aristotelian Society he says,

' That is to say, we can only arrive at a correct analysis by, what might be called, the logical investigation of the phenomena themselves, i.e., in a certain sense a posteriori and not by conjecturing about a priori possibilities. One is often tempted to ask from an a priori standpoint: What, after all, can be the only forms of atomic propositions, and to answer, e.g., subject-predicate and relational propositions with two or more terms further, perhaps, propositions relating predicates and relations to one another, and so on. But this, I believe, is mere playing with words. An atomic form cannot be foreseen.'

Proceedings of the Aristotelian Society,  
Supplementary Volume 9, p.163.

He still holds a correspondence theory of meaning in terms of which language must mirror the logical structure of reality. What he has given up is the a priori determination of what that logical structure is. It can only be known through the ' investigation of the phenomena themselves '.



This seems to be one of Wittgenstein's first moves away from the a priori ' explanation ' of language to its understanding through investigation. Instead of making mere assumptions about language and its relation to reality, instead of working out the implications of what was, from the very start, an idealisation, one should observe language in action.

' ...we can avoid ineptness or emptiness in our assertions only by presenting the model as what it is, as an object of comparison - as, so to speak, a measuring-rod; not as a preconceived idea to which reality must correspond. ( The dogmatism into which we fall so easily in doing philosophy.)'

Investigations, p.51e.

' The more narrowly we examine actual language, the sharper becomes the conflict between it and our requirement. ( For the crystalline purity of logic was, of course, not a result of investigation; it was a requirement.) The conflict becomes intolerable: the requirement is now in danger of becoming empty. We have got onto slippery ice where there is no friction and so in a certain sense the conditions are ideal, but also, just because of that, we are unable to walk. We want to walk: so we need friction. Back to rough ground.'

Op.cit., p.46e.

### The philosophy of language and its relation to science.

No theory has the right to make requirements of its subject-matter. If a theory is out of keeping with what it claims to explain, the fault lies with it, not with

its data. An ideal theory is one which does not need to be adjusted to fit the facts, since it already fits them. So a theory which requires the facts to fit it is in a sense 'ideal', or seems to be; it need not be adjusted. But, for that very reason, it is not a theory at all. The futility of making requirements of language is not ameliorated by applying them to some hypothetical system on which ordinary language is thought to rest. For then it is still required that language does depend on the hypothetical system. Is there any good in advancing P as the explanation of Q if, in the event of P's not doing this, the blame is put on Q? Obviously not; it is therefore wrong of the philosopher or logician to try to force language into the pattern of an ideal or to talk of idealised systems which he claims, without explanation, are somehow presupposed by language. When the philosopher speaks of propositions, names and sentences, he ought, in the first instance anyway, to mean the propositions, names and sentences of ordinary language.

' The philosophy of logic speaks of sentences and words in exactly the sense in which we speak of them in ordinary life when we say e.g. " Here is a Chinese sentence " or " No, that only looks like writing; it is actually just an ornament " and so on. We are talking about the spatial and temporal phenomenon of language, not about some non-spatial, non-temporal phantasm.'

Op.cit., pps.46e & 47e.

This does not mean that the ideal does not have its place in the explanation of meaning. Preconceptions are useful as models, as means of exploration. A model which is at odds with fact may nevertheless be valuable, for in trying to fit it to the facts we discover what the facts are. Furthermore, a preconception qua model may be a focal-point of similarity and difference; it can be a means of comparison and can thus not only reveal the variety of data but suggest more appropriate models.

The preconceptions and their workings-out which constitute the Tractatus are valuable in this way. The system is an ' object of comparison ' which increases our understanding of language by its difference from language. It is the first of Wittgenstein's language games.

' Our clear and simple language-games are not preparatory studies for a future regularisation of language - as it were first approximations, ignoring friction and air-resistance. The language-games are rather set up as objects of comparison which are meant to throw light on the facts of our language by way not only of similarities, but also of dissimilarities.'

Op.cit., p.50e.

The language-game is an ' object of comparison '. By it we discover similarities and differences. It is therefore a tool for description and classification.

Wittgenstein's later philosophy thus presents us with language as a datum and with a means for analysing and classifying our datum. Can the suggestion be that the philosophy of language is, in reality, the science of language? Are we being told to classify and then to generalise, with the explanation of meaning as our goal?

No! On the contrary, Wittgenstein rejects even the first step of the process. While describing the language-game as an object of comparison he simultaneously denies that the philosopher's business is theorising or even classifying. For one thing, the desire to systematise conflicts with the 'family resemblance'. Can you systematise number? Just think how many types of number there are. Can you systematise games? Just think how many types of game there are.

He seems to be saying that language is impossibly complicated; you couldn't classify it, if you wanted to. He seems to be saying that even if we have objects of comparison, none will be adequate for the task; some nuance will go unobserved, some difference be blurred. Systematising implies a clarity and uniformity which do not exist in language. Wittgenstein had already said this in The Blue Book when he attributed the true origin of metaphysics to philosophy's foolish imitation of science.

' Our craving for generality has another



main source: our preoccupation with the method of science. I mean the method of reducing the explanation of natural phenomena to the smallest possible number of primitive natural laws; and, in mathematics, of unifying the treatment of different topics by using a generalisation. Philosophers constantly see the method of science before their eyes, and are irresistibly tempted to ask and answer questions in the way science does. This tendency is the real source of metaphysics, and leads the philosopher into complete darkness. I want to say here that it can never be our job to reduce anything to anything, or to explain anything. Philosophy really is "purely descriptive".

...Instead of "craving for generality" I could also have said "the contemptuous attitude towards the particular case".

The Blue and Brown Books, p.18.

Wittgenstein seems to have three reasons for rejecting the possibility of philosophy being the science of language or even a science at all. One is that philosophy, imitating science, has tried to explain the everyday world in terms of hypothetical entities like sense-data, 'objects' and universals which have no real basis in fact and which consequently explain nothing; thus, the most a philosopher can do is to present the facts and leave their explanation to the scientist. Another reason is that philosophy's concern with language is the practical one of relieving tension or linguistic 'cramp', of getting language on the move again, whereas a science of language would assume that it was already in good order. The third is that language, in any case, is too subtle and diverse to be



described systematically i.e. there cannot be any such science as ' the science of language '.

Perhaps Wittgenstein is right; philosophy cannot be the science of language. This is certainly not because there is no such science, since there manifestly is, as the work of modern linguistics shows. The second reason was that philosophy straightens out what may then become the subject-matter of some theory.

' The philosopher's treatment of a question is like the treatment of an illness.'

Investigations, p.91e.

' The results of philosophy are the uncovering of one or another piece of plain nonsense and of bumps that the understanding has got by running its head up against the limits of language.'

Op.cit., p.48e.

' There is not a philosophical method, though there are indeed methods, like different therapies.'

Op.cit., p.51e.

But if the philosopher is a kind of doctor, if philosophy is the treating of linguistic ailments, why not admit that philosophy, like medicine, includes both theory and practice? That the doctor's concern is primarily practical did not

prevent the rise of medical science; and just as illness, abnormality and breakdown form part of the subject-matter of the science used by doctors, so must nonsense and its varieties act as data for the science of language, a science on which the philosopher can, and ought to, rely.

As to the first reason, that philosophy ought not to imitate science, on pain of producing pseudo-theories, may we not, very often, construe philosophic ' theorising ' as an initial step towards science?

' If you ask a mathematician, a mineralogist, a historian, or any other man of learning, what definite body of truths has been ascertained by his science, his answer will last as long as you are willing to listen. But if you put the same question to a philosopher, he will, if he is candid, have to confess that his study has not achieved positive results such as have been achieved by other sciences. It is true that this is partly accounted for by the fact that, as soon as definite knowledge concerning any subject becomes possible, this subject ceases to be called philosophy, and becomes a separate science. The whole study of the heavens, which now belongs to astronomy, was once included in philosophy; Newton's great work was called " the mathematical principles of natural philosophy ". Similarly, the study of the human mind, which was, until very lately, a part of philosophy, has now been separated from philosophy and has become the science of psychology. Thus, to a great extent, the uncertainty of philosophy is more apparent than real: those questions which are already capable of definite answers are placed in the sciences, while those only to which, at present, no definite answer can be given, remain to form the residue which is called philosophy.'

' In the history of human inquiry, philosophy has the place of the initial central sun, seminal and tumultuous: from time to time it throws off some portion of itself to take station as a science, a planet, cool and well regulated, progressing steadily towards a distant final state. This happened long ago at the birth of physics: only in the last century we have witnessed the same process once again, slow and at the time almost imperceptible, in the birth of the science of mathematical logic, through the joint labours of philosophers and mathematicians. Is it not possible that the next century may see the birth, through the joint labours of philosophers, grammarians, and numerous other students of language, of a true and comprehensive science of language?'

Philosophical Papers, p.180: J. L. Austin.

Though the philosopher's theories may be bad and may have led him ' into complete darkness ' this does not mean that he ought not to theorise; if he theorises, he must take care that his theory fits the facts. If his theory is about meaning, he must deal with meaning as he finds it.

In fact, Wittgenstein's disclaiming any role as a theorist is inconsistent with his practice both in his early and in his late philosophy. He may say that the philosopher cannot theorise, but the Tractatus is a theory of meaning; its last remark but one is justly notorious.

' My propositions serve as elucidations

in the following way: anyone who understands me eventually recognises them as nonsensical, when he has used them - as steps - to climb up beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)'

Tractatus, p.151.

In recognising why Wittgenstein had to say this, we are under no obligation to accept it; we must merely deny that all of the theory is true. There can be no real doubt that the Tractatus is to be judged as a theory of meaning and that in Wittgenstein's later work there are theoretical assumptions and beliefs about language together with a means for its study. Is Wittgenstein's blindness to the virtues of his later work, qua theory of language, caused by his acute awareness of the vices of his early writings? This is perhaps part of the explanation, to which, possibly, a companion is the continuation in his thought of the distinction between showing and saying, with the correlative doctrine that what is shown cannot be said; the logical is ineffable.

The Tractatus is, for the most part, a philosophical theory about language. It seems best to understand it as part of the process of setting up a science of language, and this means an empirical science which seeks to explain the structure of language and how it works. The fact that Wittgenstein did not intend the theory to be seen in this way is irrelevant, unless we are content to leave it as a meaningless, if beautiful,



piece of work. We can make good sense of it by fitting it into a pattern of change remarked by Russell and Austin, the change from a priori speculation to empirical explanation.

The general task of the Tractatus and the part to which this thesis is devoted.

' Thus the aim of the book is to set a limit to thought, or rather - not to thought, but to the expression of thought; for in order to be able to set a limit to thought, we should have to find both sides of the limit thinkable ( i.e. we should have to be able to think what cannot be thought.).

It will therefore only be in language that the limit can be set, and what lies on the other side of the limit will simply be nonsense.'

Preface to the Tractatus.

The general aim of the Tractatus may be specified by two questions:-

1. What can be said?
2. How is it said?

In other words, it seeks to explain sense and nonsense. It does this at three levels, the level of act ( what are the necessary and characteristic acts in using language?), syntax ( what are the fundamental structural features of language?) and semantics ( how do we assign or determine the meaning of particular expressions?).



According to the theory, the characteristic and principal linguistic act is that of asserting; but this depends on the act of picturing or representing, and this, in turn, depends on the act of referring. A fourth type of act is that of operating on pictures. The three main act-categories are:-

1. Asserting/denying.
2. Picturing and operating with or on pictures.
3. Referring.

The syntax of language is divided into the syntax of elementary propositions and sentences and the syntax of non-elementary or derivative propositions and sentences. According to the syntax of an elementary sentence there is only one syntactic type, the noun; there are no verbs, prepositions, articles, adverbs or modifiers of any sort. Each syntactic form at this most elementary level has at least two places for nouns. It would seem that there are different forms of elementary sentences which not only have numerical implications but also restrict the sort of relation the nouns may have to one another; syntactic forms thus make abstract relational restrictions on the nouns which fill them.

These syntactic forms are pre-linguistic in the sense that, although they are used in language, they would exist whether there was any language or not; they not only structure language but the whole of reality as well. These forms, in their linguistic or syntactic aspect, are ways

of putting nouns together; in their metaphysical, pre-linguistic aspect, they are ways of putting ' objects ', the fundamental elements of reality, together.

The syntax of the derivative sentence has nothing to do with that of the elementary one, though it must presuppose that the elementary sentence has a syntax. Syntactic forms at this non-elementary level have places for sentences and operators, but not for nouns. There are two fundamental forms, each having a place for at least one sentence and one operator; the difference is that although both have a place for only one operator, one has only one sentence-place and the other has two. These forms may be symbolised as follows:-

1. Operator space ( )/ Sentence space ( ).
2. Sentence space ( )/ Operator space ( )/  
Sentence space.

Any sentence may fill a sentence space. There are various operators, however, which can only be used with the second form e.g. the disjunctive and the conjunctive. Given some sentence S and the negation operator, and using the first syntactic form, one gets the sentence Not S; one may use the same form again, with the negation operator and the sentence Not S, to derive the sentence Not not S.

We come now to the semantic values of expressions. It is here that the correspondence theory of meaning comes into

play, for, given the three syntactic types - noun, elementary sentence and derivative sentence - the sort of meaning correlated with each is a function of some kind of correspondence. The nouns which fill the forms of elementary sentences have meaning through corresponding to fundamental elements in reality, the simples or ' objects '. The elementary sentences have meaning through corresponding to possible arrangements of objects, no such arrangement ' containing ' some other arrangement. The derivative sentences have meaning through corresponding to the ' truth-possibilities ' of elementary sentences.

No noun has meaning unless some object does in fact correspond to it. A sentence, however, may have meaning even if no complex of objects is actually correlated with it. This is one of the most important points to the whole theory. Perhaps the second most important is that the meaning of an elementary sentence presupposes its syntax which is, in a curious sense, inviolable, because metaphysical; a certain sort of nonsense, possible in ordinary language, is impossible at this fundamental level, for no word can actually be placed with any other. This is not a matter of convention or choice, as it is in ordinary language, but a total impossibility in every sense. You may therefore have meaninglessness at this level, but not the sort of nonsense of which the following is an example, ' The baby was played on the violin ', precisely because the metaphysical properties of babies and violins do not permit one of the former to be played on one of the latter.

A full analysis of the theory just stated so summarily is not attempted within this thesis, which is principally concerned with the so-called ' Picture Theory '. Exactly how much of the theory as a whole is taken up by the Picture Theory is a matter for discussion. In my view, the only parts of language seen as pictures are the elementary sentences, not the derivative ones which correspond in a different way to reality. Should one, in that case, say nothing about derivation? That would be a great mistake, for without understanding how the elementary sentence is incorporated into language one would find the theory meaningless. A study of negation, which is important both because of its role in denial and because of its truth-functional character, together with analysis of the elementary sentence, is, perhaps, enough to present the Picture Theory of the Tractatus.

Comments on some previous uses of the ' picture ' concept in philosophy.

The explanation of knowledge or belief through images or likenesses is not uncommon. Plato's Eleatic, in the Sophist, understands judgment in this way. Aristotle says, in the De Interpretatione, that words are signs of likenesses in the soul, whose objects are real things. In the Treatise, Hume identifies at least some beliefs with images of things and circumstances. Judgment, according to Kant ( Critique of Pure Reason, B93.), is ' the representation



of a representation.' It is unfair, perhaps, to credit Kant with some kind of picture-theory, particularly in view of his 'rule' analysis of understanding; at the same time, he does talk a good deal about 'representations'.

This is only a selection from a class which must include many other philosophers. Somehow it seems a natural way of explaining judgment or belief or knowledge, possibly because the philosopher has first looked inside himself in search of an answer, and finding mental images, has seen these as the obvious candidates for pieces of knowledge or belief.

It is taken, at least by Hume, to be so obvious as not to require any real discussion. What is more interesting, however, than the easy acceptance of likeness as the medium of knowledge, is the complete lack of concern about its actual role. Having drawn our attention to the fact that this - say a belief, or judgment - is an image or likeness, the matter is left there; no attempt is made to say why its being an image should explain its role. Some effort may be made to explain how the particularity of the image squares with being a 'general' idea or to explain how a red image can be an idea both of redness and of colour; these leave quite untouched the very important question:- Why should being a likeness or image of X make Y important in explaining knowledge of X?

The assumption seems to be that having an image of X is

self-evidently equivalent to thinking about X. In fact, having or seeing an image of X is neither a sufficient nor a necessary condition for thinking about X or for holding some belief about X.

If the assumption is that, presented with the image, one automatically sees it as an image then, first of all, this is not true, since a dream-image is not necessarily seen, at the time, as an image; and, secondly, it is characteristic of the ability to see something as a picture or image or likeness, that one can say what it is a picture/image/likeness of, and that makes the explanation beg the question.

There are other well-known difficulties to image or picture theories, such as the explanation of probability beliefs, knowing that something is not the case, that something is coloured an unknown colour; difficulties with what cannot be seen, about the past and so on.

These brief remarks will do no more perhaps than suggest comparisons with the past and points on which one's critical awareness should be heightened.

#### Aims of this thesis.

There are three main aims to this thesis; one is historical, one exegetical and one critical.

It would seem that the historical theme has not already been stated by any of the following: Anscombe, Black, Favrholt, Griffin, Maslow or Stenius. They would all agree on Wittgenstein's owing something to Russell, but hardly as much as is claimed in this thesis. My main historical conclusion has been developed from the suggestion made by Urmson in his book Philosophical Analysis, that Moore's article of 1899, 'The nature of judgment' ( Mind ), is a starting point of the Logical Atomist philosophy. This article is placed by me in relation to some of the work done by Russell between 1903 and 1911 so as to account not only for the emergence but for the treatment of one of those topics which is a nucleus of the Tractatus; I mean the problem of falsehood, and in particular its handling by a correspondence theory of judgment. It would seem that Wittgenstein's Picture Theory is very largely the solution, in Moore/Russell terms, of a problem arising from the philosophy of these two men. Wittgenstein's 'objects' are essentially the 'concepts' of Moore's article. His Picture Theory is essentially Russell's theory of judgment, and this would seem to include at least one version of his theory of form as found in the elementary sentence.

The special concern of the second aim, the exegetical, is the concept of logical form as this operates at the lowest level of language. Seeing the Tractatus against

the background of Russell's work is most helpful here, since Wittgenstein's concept of form, though more developed and intricate than Russell's, is essentially the same. The work of various commentators who discuss form and structure is examined, notably Black, Griffin and McGuinness.

Very little is said about the ' objects ', because of the work already done on this subject by Anscombe, Black, Copi and Keyt.

As to the last, the critical, aim, the main objections put to the Picture Theory are:-

1. Ordinary language is not as extremely simple at any of the levels of act, syntax or semantics as is the ' ideal ' of the Tractatus and therefore cannot be reduced to or explained by that ' ideal '.

2. No adequate interpretation in empirical terms is given of such key concepts as name and elementary proposition and there is no adequate or detailed account given of the procedure for moving from the level of ordinary language to that of the ' ideal ' or elementary language.

3. The explanation of the meaningfulness of the elementary sentence is inadequate. Assuming



that some elementary sentence consists of the names ' A ' and ' B ' which stand for A and B respectively, this is not enough to explain how ' A ' 's being related to ' B ' says that A is related to B.

4. Wittgenstein says that the propositions ' P ' and ' Not-P ' existentially presuppose one another. At the same time, his explanation of ' P ' 's having sense permits the non-existence of ' Not-P ' since ' P ' 's having sense depends simply on its having a pictorial relation to reality. Having explained how ' P ' gets its sense, Wittgenstein then explains the sense of ' Not-P ' in terms of ' P '.

These are the main criticisms. Others are stated alongside these main ones.

The general aim of this work may be summed up as the more accurate placing of the Tractatus in relation to its predecessors and successors with emphasis on its role in philosophical linguistics and theory of meaning.

## Chapter One

In Philosophical Analysis ( p.2 ), Urmson mentions an article by Moore which appeared in Mind, 1899. Called ' The nature of judgment ', it shows the move to realism which was Moore's reaction to the philosophy of Bradley. There is more to be mined from it, however, than just a reaction to monistic idealism, for it contains not only the theory that the objects of judgment are real, discrete entities but also the statement of the type of analysis which Moore and Russell are to claim for some time as the method of philosophy. These two themes, reductionism and the belief that the final level of analysis is that of eternal, immutable ' concepts ' which combine with one another, would seem to be clear forerunners of the Tractatus.

The immediate purpose of the article is to show what is wrong with Bradley's theory of judgment as that is expressed in the first volume of his Principles of Logic and to put something more acceptable in its place. The feature of Bradley's theory to which Moore takes particular exception is its undue psychologising of judgment, of ideas, of meaning.

Moore makes play with an ambiguity in Bradley's sense of ' idea ', an ambiguity which Bradley ' slurs over with the phrase: " But it is better to say the idea is the meaning." ' ( Mind, p.177.) Moore comments, somewhat

severely, that ' The question is surely not of which is " better to say " ( sic ), but which is true.' ( Loc.cit.) The sense of ' idea ' which Moore prefers is idea qua universal meaning, rather than idea qua mental fact, a sign of some other thing. His objections will be better understood if Bradley's position is made clearer.

' Judgment, in the strict sense, does not exist where there exists no knowledge of truth and falsehood; and, since truth and falsehood depend on the relation of our ideas to reality, you can not have judgment proper without ideas.'

Principles of Logic, p.2: F. H. Bradley.

' Not only are we unable to judge before we use ideas, but, strictly speaking, we cannot judge till we use them as ideas. We must have become aware that they are not realities, that they are mere ideas, signs of an existence other than themselves. Ideas are not ideas until they are symbols, and, before we use symbols, we can not judge.'

Loc.cit.

After complaining that in England ' we have lived too long in the psychological attitude ' Bradley explains that logic treats of ideas not as mere phenomena or psychical facts but in terms of signification. To represent truth or falsehood, the idea ' must be referred away from itself '. Its meaningfulness constitutes a third side of an existent, presupposing existence and content. But not all existents have meaning since some

signify nothing.

What is this ' meaning '? It is ' a part of the content ( original or acquired ), cut off, fixed by the mind, and considered apart from the existence of the sign.' ( Op.cit., p.4.)

' I have the " idea " of a horse, and that is a fact in my mind, existing in relation with the congeries of sensations and emotions and feelings, which make my momentary state. It has again particular traits of its own, which may be difficult to seize, but which, we are bound to suppose, are present. It is doubtless unique, the same with no other, nor yet with itself, but alone in the world of its fleeting moment. But, for logic, and in a matter of truth and falsehood, the case is quite changed. The " idea " has here become an universal, since everthing else is subordinate to the meaning. That connection of attributes we recognise as horse, is one part of the content of the unique horse-image, and this fragmentary part of the psychical event is all that in logic we know of or care for. Using this we treat the rest as husk and dross, which matters nothing to us, and makes no difference to the rest. The " idea ", if that is the psychical state, is in logic a symbol. But it is better to say, the idea is the meaning, for existence and unessential content are wholly discarded. The idea, in the sense of mental image, is a sign of the idea in the sense of meaning.

§

7. These two senses of idea, as the symbol and the symbolised, the image and its meaning, are of course known to all of us. But the reason why I dwell on this obvious distinction, is that in much of our thinking it is systematically disregarded. " How can any one," we are asked, " be so foolish as to think that ideas are universal, when every single idea can be seen to be particular, or talk of an idea which



remains the same, when the actual idea at each moment, varies, and we have in fact not one identical but many similars?" But how can any one, we feel tempted to reply, suppose that these obvious objections are unknown to us? When I talk of an idea which is the same amid change, I do not speak of that psychical event which is in ceaseless flux, but of one portion of the content which the mind has fixed, and which is not in any sense an event in time. I am talking of meaning, not the series of symbols, the gold, so to speak, not the fleeting series of transitory notes. The belief in universal ideas does not involve the conviction that abstractions exist, even as facts in my head. The mental event is unique and particular, but the meaning in its use is cut off from the existence, and from the rest of the fluctuating content. It loses its relation to the particular symbol; it stands as an adjective, to be referred to some subject, but indifferent in itself to every special subject.

The ambiguity of "idea" may be exhibited thus. Thesis, On the one hand no possible idea can be that which it means. Antithesis, On the other hand no idea is anything but just what it means. In the thesis the idea is the psychical image; in the antithesis the idea is the logical signification. In the first it is the whole sign, but in the second it is nothing but the symbolised. In the sequel I intend to use idea mainly in the sense of meaning.'

Op.cit., pps.5-7.

Bradley makes it quite clear that he is against 'psychologising' judgment. He brands it as one of the English philosopher's vices. Nevertheless, he admits that judgment has its psychological side and, consequently, is at some pains to distinguish its logical from its psychological nature. He is perfectly well aware of the

ambiguity of ' idea ' as being ' something in someone's head ' or ' what we mean by some symbol '. He describes idea qua meaning as a ' connection of attributes ', such as what ' we recognise as horse '. Idea qua symbol is ' a fact in my head ', an ' image '.

The image has meaning, because it has ' content ', some of which is inessential to it. The content of this sort of idea is made up from attributes. This content seems to be the ' meaning ' of the idea, for which the idea is a sign. One sees two relations at work here, a ' picturing ' relation which correlates images, or psychical states, with attributes, and a sign relation which makes the image a symbol of at least some of the attributes represented in it. It would seem that the content comes simply from the imaging, and that the sign-value depends both on the imaging and on some sort of selection by which part of the content, the ' essential ' part, is ' cut off '.

All is not clear; in particular, if we accept the image and sign values of the mental event, thus implying the independent existence of its meaning, in what sense can it be ' cut off ' from the image? But let us turn now to Moore's comments and criticisms.

Moore quite rightly points out an inconsistency in what Bradley says on our use of symbols. Bradley had said

( p.2, end of paragraph 2.) that we use symbols, which he later identifies as ideas qua mental events or states; but later still ( p.8.) he says ' that in predication we do not use the mental fact, but only the meaning.' In other words, he both claims that we do and that we do not use the mental events or states in making judgments. Moore puts it as follows,

' It would seem plain, then, that there his doctrine was that we do, in predication, use the mental fact, though only as a sign; whereas here his doctrine is that we do not use the mental fact, even as a sign, but only that which it signifies.'

Mind, p.177.

This, however, is by no means Moore's main complaint against Bradley, which is the very one brought by Bradley against English philosophy's psychologising. Moore attacks Bradley's account of the relation between meaning and the mind, and in particular Bradley's abstractionism. He is quite content to accept that judgment depends on meanings which, as Bradley said, are ' not in any sense...in time '. What Moore cannot accept is that such meaning could be ' part ' of an idea qua mental state or event.

' Now to Mr. Bradley's argument that " the idea in judgment is the universal meaning " I have nothing to add. It appears to me conclusive, as against those, of whom there have been too many,

who have treated the idea as a mental state. But he seems to me to be infected by the same error as theirs, alike in his preliminary failure to distinguish clearly whether it is the symbol or the symbolised of which he is speaking, and in his final description of the "idea, as meaning", when he has definitely decided in its favour. "A meaning," he says, as we saw above, "consists of a part of the content (original or acquired) cut off, fixed by the mind, and considered apart from the existence of the sign." And again, "an idea, (if) we use idea of the meaning, is neither given nor presented, but is taken" (p.8.). If indeed "the universal meaning" were thus simply a part of the content of our own minds, it would be intelligible that "truth and falsehood" should still be said to "depend on the relation of our ideas to reality". It will be our endeavour to show, on the contrary, that the "idea used in judgment" is not a part of our minds, and that hence truth and falsehood are not dependent on the relation of our ideas to reality.'

Mind, p.177.

'The content of an idea is, Mr. Bradley tells us, what the idea is; it is "a character which is different or distinguishable from that of other ideas", treated as mental facts. Now, before I can judge at all on Mr. Bradley's theory, a part of this character must have been "cut off and fixed by the mind". But my question is, whether we can thus cut off a part of the character of our ideas, and attribute that part to something else, unless we already know, in part at least, what is the character of the idea from which we are to cut off the part in question. If not, then we have already made a judgment with regard to the character of our idea. But this judgment, again, requires on Mr. Bradley's theory, that I should have had an idea of my idea, and should have already cut off



a part of the content of that secondary idea, in order that I may make a judgment with regard to the character of the primary idea that is in question. And similarly it is quite impossible that I should know what the content of my secondary idea is, until I have made it in its turn the object of a third idea, by taking part of this tertiary content. And so on ad infinitum. The theory would therefore seem to demand the completion of an infinite number of psychological judgments before any judgment can be made at all. But such a completion is impossible; and therefore all judgment is likewise impossible. It follows, therefore, if we are to avoid this absurdity, that the "idea used in judgment" must be something other than a part of the content of any idea of mine.'

Op.cit., pps.177-8.

This is Moore's main argument against Bradley. Its upshot is not to show that ideas as such cannot exist, but to prove that a certain sort of genesis is impossible. If ideas are made, and their making entails using ideas, no idea can be made; this is the core of the argument. Its other assumption is that the cutting-off process mentioned by Bradley as responsible for fixing the meaning of our ideas, does entail knowing what to 'cut off' i.e. it presupposes some other idea, which, in turn, presupposes some third idea, and so on.

It would be fair to say, first, that Moore is correct in saying that a certain sort of abstraction is impossible and is a fortiori incapable of explaining the existence of any idea; and, second, that even if Bradley's abstractionism is

of this sort, though one cannot, strictly speaking, say that this is so, Moore's argument does not establish that judgment is in no sense mental, which is what he wanted to show. It merely demonstrates that nothing can both be mental and be created in a certain manner.

The remaining five-sixths of Moore's article is devoted to Moore's own theory of meaning, with a fair amount of comment on its comparison with Kant's; it would be truer to say 'theory of judgment' because, although Bradley did introduce the question of symbolism and meaning, Moore ignores it, convinced that the real object of discussion is only incidentally related to the mind, real judgments being timeless and objective.

Moore does not, in my opinion, reveal any major defect in Bradley's treatment; at most he shows up a minor inconsistency and a certain doubt about what Bradley could have meant by 'cutting off and fixing' meaning. Our concern is not so much the criticism or defence of Bradley however, as the philosophical climate in which Moore's own ideas developed. At the same time, it is interesting to note that Moore's rejection of Bradley, in over-compensating for the 'sin' of psychologising, includes blindness to an aspect of judgment, its symbolic aspect, of which Bradley was at least aware.

On Moore's account, judgment and its elements are quite

independent of mind. What Bradley calls 'meaning' Moore calls 'concept'. The class of concepts is a genus per se and is at the same time the broadest possible class, to which everything belongs. A concept is a timeless, immutable object of thought, although it is in no sense intrinsically mental.

'The concept is not a mental fact, nor any part of a mental fact.'

'A proposition is composed not of words, nor yet of thoughts, but of concepts. Concepts are possible objects of thought; but that is no definition of them. It merely states that they may come into relation with a thinker; and in order that they may do anything, they must already be something. It is indifferent to their nature whether anybody thinks them or not. They are incapable of change; and the relation into which they enter with the knowing subject implies no action or reaction. It is a unique relation which can begin or cease with a change in the subject; but the concept is neither cause nor effect of such a change. The occurrence of the relation has, no doubt, its causes and effects, but these are to be found only in the subject.'

Mind, p.179.

Bradley's difficulty, in his own eyes, lay in reconciling the objectivity of meaning and judgment with their supposedly obvious dependence on mind, a dependence which, at the beginning of the chapter, he passes over almost apologetically. Moore sees no need for such compatibility; he simply does away with the mental connotations of the word

' concept '. ' Judgment ' and ' proposition ' are construed in a similar non-mentalist fashion. Does this mean that judgments or propositions ( which Moore equates; ' judgment or proposition ', p.179.) form a type of their own which is contrasted or compared with the world in terms of truth and falsity? No; concepts do not reflect the world; they compose it. Everything is composed of concepts, or, if not, is just one concept.

' All that exists is thus composed of concepts necessarily related to one another in specific manners, and likewise to the concept of existence.'

Op.cit., p.181.

' It seems necessary, then, to regard the world as formed of concepts. These are the only objects of knowledge.'

Op.cit., p.182.

It is difficult to see what Moore is driving at, given that the problem was, in the first place, the explanation of states of knowledge or judgment, not simply of the objects of knowledge or judgment. He started off by identifying the elements of judgments as concepts, an acceptable, because traditional, move. He then made these things non-mental, but, we would suppose, still standing, in some sense, over and against, if not the whole world, or reality, at least part of it. On the contrary, he does something which he is ' fully aware ' must seem ' paradoxical ',



even ' contemptible ' ; he identifies judgments with complexes of concepts, so that anything you care to name is either a complex or else is part of one.

' When, therefore, I say " This rose is red ", I am not attributing part of the content of my idea to the rose, nor yet attributing parts of the content of my ideas of rose and red together to some third subject. What I am asserting is a specific connexion of certain concepts forming the total concept " rose " with the concepts " this " and " now " and " red "; and the judgment is true if such a connexion is existent.'

Op.cit., p.179.

' Even the description of an existent as a proposition ( a true existential proposition ) seems to lose its strangeness, when it is remembered that a proposition is here to be understood, not as anything subjective - an assertion or affirmation of something - but as the combination of concepts which is affirmed.'

Op.cit., p.183.

' Perception is to be regarded philosophically as the cognition of an existential proposition.'

Loc.cit.

' It would seem, in fact, from this example, that a proposition is nothing other than a complex concept.'

Op.cit., p.180.

So anything is a judgment or proposition, except single concepts. To our question ' How do we make judgments?' Moore gives the answer ' We do not make them!'

' From our description of a judgment, there must, then, disappear all reference either to our mind or to the world.'

Op.cit., p.193.

It would appear that Moore's theory is not so much an explanation of judgment as a metaphysical analysis of ' reality ' which is baldly stated to consist of timeless simples from which everything transient, including the world, emerges.

The simples are, of course, the concepts, which go together to make relationships. Understanding takes the form of knowing the structure of such relationships, through their analysis.

' A thing becomes intelligible first when it is analysed into its constituent concepts.'

Op.cit., p.182.

What sorts of thing are concepts? Well, existence is a concept ( p.181.) and so is ' this ', ' now ', ' red ' and ' rose '. Is ' true ' a concept? There is no clear answer in the article to this.

At one point Moore seems to say that something can make a judgment true, other than the mere presence in it of the concept ' true '.

' What I am asserting is a specific connexion of certain concepts forming the total concept " rose " with the concepts " this " and " now " and " red "; and the judgment is true if such a connexion is existent.'

Op.cit., p.179.

The suggestion is that the existence of some relationship between the concepts quoted makes the judgment true. A little later, he says,

' What kind of relation makes a proposition true, what false, cannot be further defined, but must be immediately recognised.'

Op.cit., p.180.

' When I say " This paper exists ", I must require that this proposition be true. If it is not true, it is unimportant, and I can have no interest in it. But if it is true, it means only that the concepts, which are combined in specific relations in the concept of this paper, are also combined in a specific manner with the concept of existence. That specific manner is something immediately known, like red or two. It is highly important, because we set such value upon it; but it is itself a concept.'

Op.cit., pps.180-1.

It seems, from the last quotation, that mere combination with the concept of existence is not enough to make a judgment true since the 'specific manner' of combination is itself important. This type of combination is known immediately, like 'red or two'. But it is actually a further concept, and this puts us at something of a loss in understanding how it can both be a way in which concepts go together and yet be a possible element of such a relationship. Is this 'manner of combination' the actual concept of truth, that which binds other concepts together, the cement presupposed by the complexes, the propositions?

' Our conclusion is that truth is itself a simple concept; that it is logically prior to any proposition.'

Op.cit., p.182.

Nothing that Moore says goes much further in answering that question. Given any judgment 'its truth or falsehood cannot depend on its relation to anything else whatever, reality, for instance, or the world in space and time.' ( Op.cit., p.192.) The truth-value of a judgment is in some curious sense given with the judgment, and is immediately apprehended, like redness, through 'seeing' how the constituent concepts are related. There is no suggestion of correspondence, nor of coherence; truth is inexplicable.



The relation between Moore's article and the Tractatus is in one case direct and in another indirect, via Russell. The metaphysics of 'The nature of judgment' is strikingly like that of Wittgenstein. Moore says that reality consists of complexes, which he calls 'propositions' or 'judgments', and, ultimately, of simples or 'concepts' which can combine, to make complex concepts or judgments. These simples neither exist nor do not exist, since 'existence' is itself a concept; the simples are timeless objects of knowledge. This is almost exactly the picture of reality given by Wittgenstein, although the actual instances of concepts given by Moore e.g. 'existence', 'red' and 'rose', do not fit in to Wittgenstein's scheme. Two last similarities may be noted, holding directly between Wittgenstein and Moore, to the exclusion of Russell.

'A concept is not in any intelligible sense an "adjective", as if there were something substantive, more ultimate than it. For we must, if we are to be consistent, describe what appears to be most substantive as no more than a collection of such supposed adjectives: and thus, in the end, the concept turns out to be the only substantive or subject, and no one concept either more or less an adjective than any other.'

Op.cit., pps.192-3.

Moore's concepts and Wittgenstein's objects are all equally substantives or subjects, whereas Russell is careful to distinguish between pure subjects and universals.

The metaphysics of Russell's atomism introduces an inequality not found in either Moore or Wittgenstein. paper, that what Moore means by 'judgment' and what Bradley

The final similarity is that, whereas Russell insists on making the judging mind part of the judgment, which would consequently not exist if the mind did not, both Moore and Wittgenstein keep the mind right outside the proposition or judgment. identification of judgment with its object not

only leaves unsolved important questions about judging

' From our description of a judgment, there must, then, disappear all reference either to our mind or to the world.'

Op.cit., p.193. This is the point, as we shall see, gives Russell

This similarity does not mean that Wittgenstein's understanding of the relation between the mind and judgment is Moore's. For one thing, Wittgenstein would not agree with the complete independence from mind of judgment. Although neither gives a proper, explicit account of the relation, we can at least say that, even if Wittgenstein does make judgment in some sense mental, and Moore makes it quite non-mental, neither makes mind part of judgment: Russell's theory does.

The indirect relation between Moore and Wittgenstein operates via Russell and is caused by Moore's inadequate treatment of the psychological and linguistic nature of the proposition. Most of the time in which Moore is talking about judgment, he is really doing metaphysics.

This is perfectly permissible in stating a theory of judgment; but it is quite clear, even early in his paper, that what Moore means by ' judgment ' and what Bradley, are two different things, and that the discussion is not about how we think about or judge reality, but on the fundamental structure of possible objects of knowledge.

Moore's identification of judgment with its object not only leaves unsolved important questions about judging and meaning, but creates the considerable problem of distinguishing between fact and judgment, more particularly of distinguishing between actual facts and false judgments. This is a topic which, as we shall see, gives Russell, following in Moore's footsteps, a difficulty which is insoluble so long as the elements of the judgment are numerically identical with those of the fact. It is this difficulty, clearly emergent in Russell and already created in ' The nature of judgment ', which connects the Picture Theory with these early writings of Moore; aside, that is, from the more direct metaphysical similarity already noticed.

' The nature of judgment ' is not so much an essay on judgment as a displacement of Bradley's metaphysics. The overt subject of discussion may be knowledge of meanings, but the real one is the existence of meanings qua universals. Although Moore's principal argument is about the former, his

real disagreement with Bradley is about the latter. Indeed, it would seem possible to disagree with an abstractionist account of the existence of universals, and other objects of knowledge, while accepting an abstractionist account of knowledge.

Both Moore and Bradley think that if we mean something, there is something we mean; if we think of 'horse', we mean those attributes or properties which make up being a horse. Moore's point (p.179.), which he does not really advance as an argument, is that if something is to become a meaning, it must already be something in its own right; he cannot accept Bradley's idealising of reality. These things which we can mean are the 'concepts', ranging from redness to existence.

'Existence is itself a concept; it is something which we mean;...'

Op.cit., p.180.

Thus, the understanding of what is meant, comes, in a curious way, to be the understanding, through analysis, of the things which are the meanings. This is what Moore says in 1903,

'Definitions of the kind that I was asking for, definitions which describe the real nature of the object or notion denoted by a word, and which do not merely tell us what the word is used to mean, are only possible when the



object or notion in question is something complex. You can give a definition of a horse, because a horse has many different properties and qualities, all of which you can enumerate. But when you have enumerated them all, when you have reduced a horse to his simplest terms, then you can no longer define those terms. They are simply something which you think of or perceive, and to any one who cannot think of or perceive them, you can never, by any definition, make their nature known....And so it is with all objects, not previously known, which we are able to define: they are all complex; all composed of parts, which may themselves, in the first instance, be capable of similar definition, but which must in the end be reducible to simplest parts, which can no longer be defined.'

Principia Ethica, pps.7-8.

Thus, a real understanding of goodness is what you must attempt, if you want to know the meaning of ' good '. In fact, goodness is like being true.

' My point is that " good " is a simple notion, just as " yellow " is a simple notion; that, just as you cannot, by any manner of means, explain to any one who does not already know it, what yellow is, so you cannot explain what good is.'

Op.cit., p7.

' But yellow and good, we say, are not complex; they are notions of that simple kind, out of which definitions are somposed and with which the power of further defining ceases.'

Op.cit., p.8.



Just as being true is like being red, so being good is like being yellow. Russell fully accepts Moore's description of this sort of property, when he writes, in 1904,

' It may be said - and this is, I believe, the correct view - that there is no problem at all in truth and falsehood; that some propositions are true and some false, just as some roses are red and some white.'

Mind (1904), p.523.

' Thus the analogy with red and white roses seems, in the end, to express the matter as nearly as possible. What is truth, and what falsehood, we must merely apprehend, for both seem incapable of analysis.'

Op.cit., p.524.

This imitativeness, of course, extends to Russell's methodology. The tool of philosophy is analysis. According to Moore, the essential analysanda are the objects of knowledge. Although these are what Russell's analysis ends with, one begins with words or propositions or beliefs. Russell's is an amplified form of Moore's analysis, since it adds, to the analysis of complex objects of knowledge, the analysis of beliefs etc. about these objects.

In 1910, Russell explains the course of knowledge for the philosopher as,

' The process to be gone through

is essentially one of analysis: we have various complex and more or less confused beliefs about the true and the false, and we have to reduce these to forms which are simple and clear, without causing any avoidable conflict between our initial complex and confused beliefs and our final simple and clear assertions.

Philosophical Essays, p.171.

In 1918, he tells an audience in London that,

' The process of sound philosophising, to my mind, consists mainly in passing from those obvious, vague, ambiguous things, that we feel quite sure of, to something precise, clear, definite, which by reflection and analysis we find is involved in the vague thing that we start from, and is, so to speak, the real truth of which that vague thing is a sort of shadow.'

Logic and Knowledge, p.179.

'...( the ) last residue in analysis are logical atoms and not physical atoms. Some of them will be what I call " particulars " - such things as little patches of colour or sounds, momentary things - and some of them will be predicates or relations and so on.'

Loc.cit.

These remarks show the return of the discussion to the relation between states of mind and the things ' meant ' by them, the subject originally taken up by Bradley in the first chapter of his Principles of Logic, and turned by Moore into a debate merely about the objects themselves.

Even when it comes to the discussion of particulars, Moore insists that his concern is not with the object qua meaning, but simply with the nature of the object itself.

' My business is solely with that object or idea, which I hold, rightly or wrongly, that the word is generally used to stand for. What I want to discover is the nature of that object or idea, and about this I am extremely anxious to arrive at an agreement.'

Principia Ethica, p.6.

Admittedly there is an assumption about what meaning is, in this short quotation; that words 'stand for' their meanings. But notice the curious way in which Moore indicates his lack of concern about the actual word/thing relation; his business is solely with that object which he holds, ' rightly or wrongly ', is signified by the word. Moore is still adamant in his rejection of psychologism. It now becomes Russell's task to explain the facts about meaning, accepting Moore's view of reality as a conglomerate of discrete and non-mental entities, and at the same time wanting to develop the correspondence assumption of meaning just noticed in Moore and also present in Bradley. For, let us not forget that Bradley described ideas qua mental phenomena, as signs and symbols whose meanings are such things as the attributes of a horse. His theory of meaning is not all that different from what follows, even if his ultimate position, metaphysically speaking, is.



The re-establishment of the identity of the proposition or judgment is to become Russell's particular problem, following its disappearance during Moore's attack on psychologising. Unfortunately, although Russell's theory of judgment campaigns as a ' correspondence ' theory, thus implying that judgments are to be compared with fact or reality, no successful formula for correspondence is stated until the time of the Tractatus, precisely because Russell cannot get away from Moore's original contention that the judgment consists of the things or objects judged about. We shall find him trying with one device or another to construct two complexes out of the same elements, one being the judgment and the other the fact which makes the judgment true. It requires Wittgenstein's suggestion that the elements of the complexes are not numerically identical, but only identical in kind, to blend the correspondence theory of meaning with Moore's timeless simples. Perhaps Russell's particular contribution comes through his analysis of language in terms of names and logical forms, the reductive process in language being paralleled by the metaphysical breakdown stated by Moore to be the pattern of investigation.

#### Summary.

1. Bradley analyses meaning into mental ideas, as symbols, and attributes as their meanings.
2. Moore criticises Bradley for ' psychologising '

meaning. Moore's main argument in effect discredits a certain genetic account of knowledge of meaning but does not attain its intended target, that judgment is in no sense mental.

3. Moore says that what becomes a meaning must already exist in its own right. He calls it a 'concept'. Complex concepts, or judgments, consist of simple ones. Simple concepts are timeless and immutable; they do not really 'exist' at all, since existence is itself a concept. According to this theory, intelligibility is a function of analysability. The result of Moore's metaphysics is the identification of judgment with its object.

4. Russell accepts Moore's emphasis on analysability; he also accepts Moore's account of truth, at least to begin with. We are to see him trying to reconcile the theory that the objects of a judgment are its elements, with a correspondence theory of meaning.

5. The 'objects' of the Tractatus are strikingly like those of 'The nature of judgment'. We shall find that the Picture Theory re-establishes the identity of the judgment or proposition and does so by combining Moore's metaphysics with Russell's theory of names.

## Chapter Two.

The Principles of Mathematics of 1903 in some ways represents Russell's best work. The scope and depth and vigour of the book are wonderful. The parts to which we shall give special attention are about the relations between language, propositions and the objects of knowledge. The propositional analysis in The Principles of Mathematics is the prelude to Russell's most famous essay, ' On denoting ', of 1905.

The purpose of The Principles is to show that mathematics is one with logic. It is one of the few occasions on which Russell seems almost to be an unwilling metaphysician, and, what is more remarkable, an unwilling logician, for he remarks of the problem of truth that he will ' therefore leave this question to the logicians with the above brief indication of a difficulty ' ( p.49.). ( The difficulty is being able to talk about propositions without asserting them.)

In reality, of course, he does as much metaphysics as anyone, and as much logic too. What may seem more out of keeping with the subject of meta-mathematics is Russell's concern with grammar; he is a far from unwilling grammarian.

' The study of grammar, in my opinion,

is capable of throwing far more light on philosophical questions than is commonly supposed by philosophers... On the whole, grammar seems to me to bring us much nearer to a correct logic than the current opinions of philosophers; and in what follows, grammar, though not our master, will yet be taken as our guide.'

The Principles of Mathematics, p.42.

Russell's use of grammar is, perhaps, not quite so revolutionary as might appear. At least a decade earlier, Frege suggested the same thing. In fact it was not uncommon to link grammar with logic: a text-book of the 1870's, by W. S. Jevons, Elementary lessons in logic, contains a chapter on the grammatical analysis of sentences, actually Lesson XI, the main thesis being that ' the proper logical construction ' of a proposition is the ' conjunction of a subject, copula and predicate ' ( p.88.). But long before them, Aristotle considered the relation between logical and grammatical facts, particularly in De Interpretatione.

Russell uses grammar to determine (a) what the real objects of discourse are, and (b) what the relation is between symbolism and what is said or spoken about. Two fundamental distinctions are made in each area of discussion. In the first, the distinction is between those things which can only be logical subjects and those which can be both logical subjects and logical predicates too. In the second, the distinction is between naming and



asserting, or between names and propositions. The grammatical distinction most in mind is the subject/predicate one. But Russell does not take this to be directly applicable to the objects of discourse, since he finds that certain things can correspond either to the grammatical subject or to the grammatical predicate. The Principles leaves Russell with a problem unsolved, the identity of what corresponds with, and hence gives meaning to, such expressions as 'Caesar's death'. This is the problem of 'On denoting'.

In The Principles, the objects of discourse are called 'terms'. Any object of thought, let alone discourse, is a term (p.43.).

'A term is, in fact, possessed of all the properties commonly assigned to substances or substantives. Every term, to begin with, is a logical subject: it is, for example, the subject of the proposition that itself is one. Again every term is immutable and indestructible.'

Op.cit., p.44.

'The notion of a term here set forth is a modification of Mr G. E. Moore's notion of a concept in his article 'On the Nature of Judgment', Mind, N.S. No.30, from which notion, however, it differs in some important respects.'

Op.cit., footnote to p.44.

The chief modification seems to be the sharp distinction between terms which are 'things' and terms which are

' concepts '. Whereas Moore had made everything a concept, Russell separates what are ' indicated by proper names ' i.e. things, from what are indicated ' by all other words ', i.e. concepts ( p.44.). The distinction is further elaborated.

' Socrates is a thing, because Socrates can never occur otherwise than as term in a proposition: Socrates is not capable of that curious two-fold use which is involved in human and humanity.'

Op.cit., p45.

Russell's use of ' term ' is ambiguous; he had earlier given all the objects of thought as terms, but here means by ' term ' ' logical subject '. Socrates is, and can only be, a logical subject. Other entities are capable of the ' curious two-fold use which is involved in human and humanity '; these are the concepts; they may be predicated of other things or they may occur as logical subjects. The same concept corresponds both to ' human ' and to ' humanity ', in the former case as predicate and in the latter as subject.

5/ ' Predicates are distinguished from other terms by a number of very interesting properties, chief among which is their connection with what I shall call denoting.'

Loc.cit.

Russell finds it difficult to say exactly what denoting

is. It has ' been obscured hitherto by an undue admixture of psychology ' ( p.53.).

' A concept denotes when, if it occurs in a proposition, the proposition is not about the concept, but about a term connected in a certain way with the concept. If I say " I met a man ", the proposition is not about a man: this is a concept which does not walk the streets, but lives in the shadowy limbo of the logic-books. What I met was a thing, not a concept, an actual man with a tailor and a bank-account or a public-house and a drunken wife.'

Op.cit., p.53.

One cannot say that the relation of denoting is much clearer; when a concept denotes, it is in some sort of connection with a term. We are not told what this ' connection ' is; it is not even clear in the example given, that the concept corresponding to ' a man ' is always in the process of denoting. Although we can get the notion of denoting ' by a kind of logical genesis from subject-predicate propositions, upon which it seems more or less dependent ' ( p.54.) Russell is to offer no fuller explanation of it. But, if he cannot reveal its structure, he can assess its importance, for it ' lies at the bottom of all theories of substance, of the subject-predicate logic, and of the opposition between things and ideas, discursive thought and immediate perception.' ( p.53.)

Russell's analysis, having moved from the grammatical distinction of subject and predicate to the metaphysical one of thing and concept, continues in a more complicated way, making the nucleus of the subject part of the proposition the name and the nuclei of the predicative part the verb and adjective or name. He further distinguishes names into proper names and general ones.

His concept of a proper name is applied inconsistently, for at one point ( p.44.) he says that things ' are the terms indicated by proper names, the latter ( i.e. concepts )...by all other words ' and then, much later, writes ' that concepts can be objects and have proper names ' ( p.502.). The distinction between names and proper names is not, according to the later remark, parallel to that between concepts and things, although the earlier remark surely implies this. The real difference would seem to be that whereas an expression qua proper name indicates one and only one thing, a general name may be used of many things.

The broadening of the type of entity which can be indicated by a proper name, from thing to thing and concept, avoids the difficulty on which Frege and Benno Kerry disagreed, the former denying that one could actually talk about concepts. Frege appeals, in his article ' On concept and object ' of 1892, to ordinary



grammar; he cautions us not to establish logical distinctions on grammatical ones, but to treat the latter as hints of the former.

' A name of an object, a proper name, is quite incapable of being used as a grammatical predicate.'

Translations from Frege, p.43; Geach and Black.

On the other hand, ' the concept ( as I understand the word ) is predicative ' ( loc.cit.); it ' is, in fact, the reference of a grammatical predicate ' ( loc.cit.).

As Russell was later to do in The Principles, Frege takes the subject-predicate distinction in grammar to imply a corresponding metaphysical distinction between logical subjects and logical predicates. The former he calls ' objects ', the latter ' concepts '. No concept can be an object, because it is essentially predicative. Just as no expression for an object i.e. no proper name, can be used predicatively, and no predicative expression be used as a grammatical subject, so neither an object nor a concept can play the role of the other.

By seeing the ' is ' of ' He is Alexander the Great ' as performing the same function as ' = ', in arithmetic, Frege shows that ' Alexander the Great ' is still being used as a name. And although ' the morning star ' does

contain the concept-words ' morning ' and ' star ', the expression is not predicative; it is actually a name; ' the singular definite article always indicates an object ' ( op.cit., p.45.). It is this which makes it difficult for him to account for such expressions as ' the concept horse ', since this does contain the singular definite article and yet seems to refer to what cannot be a logical subject. So either the expression can indicate nothing, or it indicates an object and not a concept, or something can be both a concept and an object, or, finally, the logical-subject class is not co-extensive with either the whole or part of the object class.

Russell chooses the latter, thus allowing concepts to be logical subjects. Frege chooses the second alternative, maintaining a rigid distinction between the predicative concept and what corresponds to the grammatical subject, the object of discourse.

' Kerry does not appeal to this; instead, he gives the following example: " the concept ' horse ' is a concept easily attained," and thinks that the concept ' horse ' is an object, in fact one of the objects that fall under the concept ' concept easily attained '. Quite so; the three words " the concept ' horse '" do designate an object, but on that very account they do not designate a concept, as I am using the word. This is in full accord with the criterion I gave - that the singular definite article always indicates an object, whereas the indefinite article accompanies a concept-word.'

Op.cit., p.45.

' One would expect that the reference of the grammatical subject would be the concept; but the concept as such cannot play this part, in view of its predicative nature; it must first be converted into an object, or, speaking more precisely, represented by an object.'

Op.cit., p.46.

One sympathises with Frege's critic. The representation of concepts by objects is surely an admission that one can talk about them. Moreover, if one thing represents another, the two things cannot be fundamentally different. Why not simply admit that one can talk about and refer to concepts, particularly since Frege believes that one concept can fall under another? Surely the concept horse is a concept?

Russell avoids this sort of difficulty by permitting direct reference to concepts. ( He gives a detailed discussion of Frege's theory in Appendix A of The Principles.) At the same time he preserves a set of things which cannot be other than logical subjects.

Both Russell and Frege believe the subject-predicate grammatical distinction to have a metaphysical implication, namely, that there is one type of thing no one of which is a property, and another type of thing any one of which is a property, the first being the ' thing ' or object type, the second, the concept type. If something falls under a Fregean concept, it has that concept as a property ( p.51.). The same would seem to be true of anything falling under

a Russellian concept. Both systems admit of things and concepts falling under concepts.

Concerning language, both distinguish between proper names and concept words, although each allows that a proper name may include a concept word, if the name uses the singular, definite article (Some proper names ' are derived from concepts by means of the ' ( The Principles, p.502.)). Expressions like ' the man with the dog ' are proper names and have meaning. Russell would say that ' John ' merely indicates without having meaning.

Frege draws an important distinction between the sense of a name and its reference, between its having sense and its having reference. This follows from his recognition of the facts that the same thing may be referred to by using different concept words and that some name may lack a reference. He applies the same distinction to complete sentences and for the same reasons; different sentences may have the same reference; some sentences, with sense, may have no reference. The sense of a sentence is what Frege calls a ' thought '.

' In our example, accordingly, the reference of the expressions " the point of intersection of a and b " and " the point of intersection of b and c " would be the same, but not their senses. The reference of " evening star " would be the same as that of " morning star ", but not the sense.'



' So far we have considered the sense and reference only of such expressions, words, or signs as we have called proper names. We now inquire concerning the sense and reference for an entire declarative sentence. Such a sentence contains a thought. Is this thought, now, to be regarded as its sense or its reference? Let us assume for the time being that the sentence has reference. If we now replace one word of the sentence by another having the same reference, but a different sense, this can have no bearing upon the reference of the sentence. Yet we can see that in such a case the thought changes; since, e.g. the thought in the sentence " The morning star is a body illuminated by the Sun " differs from that in the sentence " The evening star is a body illuminated by the Sun." Anybody who did not know that the evening star is the morning star might hold the one thought to be true, the other false. The thought, accordingly, cannot be the reference of the sentence, but must be considered as the sense. What is the position now with regard to the reference? Have we a right even to inquire about it? Is it possible that a sentence as a whole has only a sense, but no reference? At any rate, one might expect that such sentences occur, just as there are parts of sentences having sense but no reference. And sentences which contain proper names without reference will be of this kind. The sentence " Odysseus was set ashore at Ithaca while sound asleep " obviously has a sense. But since it is doubtful whether the name " Odysseus ", occurring therein, has reference, it is also doubtful whether the whole sentence has one. Yet it is certain, nevertheless, that anyone who seriously took the sentence to be true or false would ascribe to the name " Odysseus " a reference, not merely a sense; for it is of the reference of the name that the predicate is affirmed or denied. Whoever does not admit the name has reference can neither apply nor withhold the predicate. But in that case it would be superfluous to advance to the reference of the name; one could be satisfied with the sense, if one wanted to go no further than the thought. If it were a question only of the sense of the sentence, the thought, it would be

unnecessary to bother with the reference of a part of the sentence; only the sense, not the reference, of the part is relevant to the sense of the whole sentence. The thought remains the same whether "Odysseus" has reference or not.'

Op.cit., pps.62-3.

In this way Frege accounts for meaning ultimately through correspondence, the correspondence of predicative words to concepts. His distinction between sense and reference allows him to maintain the meaningfulness of an expression, even if it has no reference; its being meaningful amounts to the possibility of its having a reference which it could indicate, if the reference actually existed. He does not, of course, account for all meaning through correspondence, but only for one essential aspect of it.

Russell devotes a considerable part of The Principles to this work of Frege's, a complete appendix in fact. He remarks, quite correctly, that '...Frege's position on this question is more subtle than mine, and involves a more radical analysis of judgment' ( p.502.). In spite of this acknowledgment, Russell cannot agree with Frege. The exact nature of the disagreement is difficult to determine because of Russell's uncertainty about what he himself means. He is not at all clear about the relation between assertion and the proposition, or about the relation of either to truth. He says, for

instance, that ' an asserted proposition, it would seem, must be the same as a true proposition ' ( p.504.); what he means by ' assertion ' has nothing to do with psychological states or acts.

' But assertion does not seem to be a constituent of an asserted proposition, although it is, in some sense, contained in an asserted proposition.'

Op.cit., p.504.

What he is trying to explain is the difference between the single occurrence of a sentence and its occurrence in some larger sentence, such that, in the former, but not the latter, we assume the assertion of the corresponding proposition. But he obscures this issue, which is the distinction between the presentation of a thought and the presentation of a judgment or assertion, by introducing what he calls Frege's ' divorce ' of assertion from truth. He cannot see any point in separating the assertion of a proposition from its truth-value, as Frege does, since an asserted proposition is just a true one and vice versa. He cannot see any point in distinguishing judgment from meaning, since the proposition somehow already contains assertion, although it can also occur in ' an unasserted form ' in some other proposition. Russell rejects the Fregean distinctions between the content of a judgment, the making of a judgment and the circumstance of the judgment's being true ( or, perhaps false ).

'....: it seems quite sufficient to say that an asserted proposition is one whose meaning is true, and that to say the meaning is true is the same as to say the meaning is asserted.'

Op.cit., p.505.

On Russell's theory, which is not fully worked out, meaning, assertion and the proposition's being true, all coalesce to form a non-psychological complex. The distinctions so carefully drawn by Frege are obliterated; but this does not mean that Russell's theory is much inferior to Frege's. Russell is keenly interested in explaining what a true judgment actually does, and is surely justified in not accepting its analysis in terms of a thought, and something, an ' object ', called ' the True '. Although Frege draws important distinctions between a thought, or the meaning of a sentence, the use of the sentence in making a judgment, and the circumstance of the thought's being true ( or false ), his explanation of those distinctions is either perfunctory or carries us only as far as Russell's.

Admittedly, Frege's sense/reference distinction takes him past a difficulty which Russell is just beginning to experience - how to explain expressions like ' the death of Caesar ' - since something may be a possible, if not an actual, name; even if there is no such thing as Caesar's death, ' the death of Caesar ' may still have sense. But the important relation between a proposition's being true ( or false ) and reality is as great a mystery in Frege



as it is in Russell. And his assimilation of propositions to referring expressions is just as wrong an exaggeration as Russell's assimilation of referring expressions to propositions; we shall presently see Russell describing expressions of the form ' the ( ) ' as really being complexes of propositions.

Russell's initial treatment of such expressions is as follows.

' Words all have meaning, in the simple sense that they are symbols which stand for something other than themselves. But a proposition, unless it happens to be linguistic, does not itself contain words: it contains the entities indicated by words.'

The Principles, p.47.

Now compare ' Caesar died ' with ' the death of Caesar '; the concepts are the same, but on the one hand you have a proposition, and on the other a logical subject. It looks, therefore, as if the same complex corresponds to both sets of words.

' By transforming the verb, as it occurs in a proposition, into a verbal noun, the whole proposition can be turned into a single logical subject, no longer asserted, and no longer containing in itself truth or falsehood. But here too, there seems to be no possibility of maintaining that the logical subject which results is a different entity from the proposition. " Caesar died " and " the death of Caesar " will illustrate this point.'

Op.cit., p.48.

Russell's only bother about admitting that one and the same complex corresponds to the two expressions, is that a proposition in some way 'contains' assertion, which he correlates with the action of the verb; in some way a verb can turn a logical subject into a proposition or assertion. How this is done is incomprehensible to him, as he freely admits, leaving the question 'to the logicians'! Two paragraphs later, Russell gives further consideration to the nature of the complex corresponding to the proposition, but not this time to distinguish the concept qua logical subject from the concept qua proposition; the question now is, how are the constituents of the proposition put together to make a single complex?

' The twofold nature of the verb, as actual verb and as verbal noun, may be expressed, if all verbs are held to be relations, as the difference between a relation in itself and a relation actually relating. Consider, for example, the proposition "A differs from B". The constituents of this proposition, if we analyze it, appear to be only A, difference, B. Yet these constituents, thus placed side by side, do not reconstitute the proposition. The difference which occurs in the proposition actually relates A and B, whereas the difference after analysis is a notion which has no connection with A and B. It may be said that we ought, in the analysis, to mention the relations which difference has to A and B, relations which are expressed by is and from when we say "A is different from B". These relations consist in the fact that A is referent and B relatum with respect to difference. But "A, referent, difference, relatum, B" is still merely a list of terms, not a proposition. A proposition, in fact

is essentially a unity, and when analysis has destroyed the unity, no enumeration of constituents will restore the proposition. The verb, when used as a verb, embodies the unity of the proposition, and is thus distinguishable from the verb considered as a term, though I do not know how to give a clear account of the precise nature of the distinction.'

Op.cit., pps.49&50.

The two problems of most interest, so far as our concern in the Tractatus is concerned, are:-

1. How can what corresponds to ' the death of Caesar ' also correspond to ' Caesar died '?
2. How can something both be a constituent of a propositional complex and at the same time give unity to the complex?

Russell's answer to the first question is given, of course, in his essay of 1905, ' On denoting '. He twice attempts an answer to the second question, once in ' On the nature of truth and falsehood ' ( 1910 ) and again in his book The Problems of Philosophy ( 1912 ). These are the two most interesting of the problems explicitly considered by him; there is a third, which he does not take up.

3. What are the elements of the proposition?

Russell doesn't really consider this at all, except to amend Moore's metaphysics by distinguishing things from concepts. He still assumes that propositional elements are identical with the objects of discourse. It is this unquestioned assumption which is to give him such a headache later on.

This continued allegiance to Moore is reflected in Russell's articles on Meinong which appeared in Mind in 1904. These were to introduce Meinong to English readers who had no access to the original German. Russell begins his task by sketching his own position.

'...every presentation and every belief must have an object other than itself, and, except in certain cases where mental existents happen to be concerned, extra-mental; that what is commonly called perception has as its object an existential proposition, into which enters as a constituent that whose existence is concerned, and not the idea of this existent; that truth and falsehood apply not (ot) beliefs, but to their objects; and that the object of a thought, even when this object does not exist, has a Being which is in no way dependent upon its being an object of thought: all these are theses which, though generally rejected, can nevertheless be supported by arguments which deserve at least a refutation. Except Frege, I know of no writer on the theory of knowledge who comes as near to this position as Meinong.'

Mind ( 1904 ), p.204.

In a footnote, he tells us that he has ' been led to accept these theses by Mr G. E. Moore '.



Meinong's distinctions between assumptions, judgments and objects, which are roughly parallel to Frege's thoughts, judgments and objects and concepts, are rejected by Russell. He cannot see any difference between being given an assumption and being given a proposition; he does not understand 'in what sense an assumption is not a presentation of a proposition' (Op.cit., p.339.).

'The question is this: Does an assumption have a different object from the corresponding judgment, or does it merely have a different attitude to the same object (the proposition)? The case of belief and disbelief shows that it is possible to have different attitudes to the same object, and thus allows us to accept the view, which is prima facie the correct one, that there is no difference in the object.'

Op.cit., p.339.

His objection, of course, weights the answer in his own favour; if he had considered whether some poem or novel has the same object as some observation about, say, the weather, or, indeed whether there is any object at all, in the former cases, he would have been nearer the mark. Without pursuing his disagreements with Meinong any further, let us leave these articles with a quotation containing Russell's picturesque, and Moorean, description of truth.

'It may be said - and this is, I believe, the correct view - that there is no problem at all in truth and falsehood; that some propositions are true and some false, just as some roses are red and some white...'

This quotation ( p.523.) amply reveals a metaphysical vision of a world from which anything thinkable can be summoned. True propositions are like red roses, false ones like white. So that real existent things and unreal non-existent things are both to be had in some form or another. It is from this nightmare of metaphysical monsters that Russell's theory of descriptions delivers him. Such expressions as ' the man who broke the bank at Monte Carlo ' do not require single existent or subsistent terms to correspond to them to give them meaning. Instead, they are broken up into propositions whose concept words are guaranteed corresponding objects. The objects of discourse which correspond to ' the man who broke the bank at Monte Carlo ' do not include such a man, but consist of the properties of being a man, being a bank and having broken a bank, together with the town itself and the relation of being in or at. ' The death of Caesar ' is thus assimilated to ' Caesar died '. This is the theory in brief. A fuller exposition follows below.

The overriding question is whether or not propositions like ' The king of France is bald ' have logical subjects. Why is this so important? Because, irrespective of the actual truth or falsity of the proposition, its constituents, including its logical subject ( if it has one ), must exist in some form or other. If it means anything, something is its meaning, and the individual meanings of the words

are parts of that meaning. So that if a proposition has meaning and has a logical subject, that logical subject is part of the meaning. This is Russell's view. It follows that if some proposition both has meaning and is about, say, the king of France, that person, its logical subject, is part of the proposition's meaning. Nothing has yet been said which was not said in The Principles of Mathematics. The change comes with Russell's unwillingness to have the king of France as a logical subject, if there is no such person. He finds a non-existent king of France metaphysically objectionable; this is where he faults Meinong and his theory which ' regards any grammatically correct denoting phrase as standing for an object ' ( ' On denoting ', Logic and Knowledge: edited by R. C. Marsh: p.45.). If there is no king of France, he is certainly not a logical subject, and therefore not a constituent of the proposition that the king of France is bald.

One obvious remedy is to deny that there is any such proposition, since one of its ingredients is missing. It cannot be denied, however, that whether there is a king or not, we can understand what is meant by ' The king of France is bald '. There remain two other alternatives, which, of course, would have to be supplemented by explanation. One is that if there is such a person as the king of France, he is the logical subject; sometimes the proposition has, and sometimes it hasn't, a logical subject, depending on whether he exists or not. Now, this sort of account would have to be in two parts, one

dealing with those times at which the meaning did come from the inclusion of the king as a constituent of the proposition, and thus of its meaning; and another part dealing with those times at which there was no such person, at which he could not be part of the meaning, thus necessitating some other constituent analysis. That is one of the alternatives to admitting that there is no such proposition as that the king of France is bald, assuming, as Russell does, that the meaning and the proposition are in some sense identical. The other alternative is to deny that the king ever is a constituent of the proposition, whether he exists or not. This, in my opinion, is the alternative Russell follows, although not the one he chooses, since he does not actually consider the matter. In fact he obscures it with epistemological questions about objects of awareness and also with a certain confusion about the relation between grammatical and logical subjects. In my opinion, Russell's analysis of the meaning of the sentence 'The king of France is bald' implies that the things meant, the elements of the meaning, those objective things in terms of which the sentence has meaning, never include the king himself because his existence need never be allowed for. If the proposition is about anything, it is about France, being a king and being bald; this is certainly what Russell suggests, in order to avoid the difficulty of admitting that, though it is not about the king, since there is no king, the proposition still has meaning. In fact, the proposition,



on a Russellian analysis, is not really about anything, at any time, since the subject-expression ' the king of France ' can be done away with in favour of purely predicative expressions, like ' is a king ', excepting, of course, the proper name ' France ' to which something must correspond. This seems to be a case of there being no king because there are no subjects.

To understand the word ' the ', according to Russell, at least from a philosophical point of view, one has to know how to break it up. This breaking up process replaces propositions in which such phrases occur with propositions in which they do not occur.

' The phrase per se has no meaning, because in any proposition in which it occurs the proposition, fully expressed, does not contain the phrase, which has been broken up.'

Op.cit., p51.

The phrase in mind is ' the author of Waverley '. This looks as though it functions just like the name ' Scott '. These two expressions are, in fact, quite different.

' If I say " Scott was a man ", that is a statement of the form " x was a man ", and it has " Scott " for its subject. But if I say " the author of Waverley was a man ", that is not a statement of the form " x was a man ", and does not have " the author of Waverley " for its subject. Abbreviating the statement made at the beginning of this article, we may put, in place of " the author

of Waverley was a man ", the following:  
 " One and only one entity wrote Waverley,  
 and that one was a man ".'

Loc.cit.

In other words, expressions of the form ' the A ' can be replaced by expressions of the form ' one thing is A; no two things are As ; anything that is an A is ( ) '.

" Scott " is the subject of the statement " Scott was a man "; " the author of Waverley " is not the subject of the statement " the author of Waverley was a man ". Both are grammatical subjects in their respective sentences. However there is some sense in which " Scott " is a subject and " the author of Waverley " is not. If the difference is not a grammatical one, is it then logical? Does Russell mean that " Scott " is a logical subject whereas " the author of Waverley " is not? Or does he mean that the man Scott is a logical subject with respect to the statement " Scott was a man ", whereas the same man, as the author of Waverley, is not a logical subject with respect to the statement " the author of Waverley was a man " ? If he means the man Scott, why does he put his name in quotation-marks? Is he talking about expressions or about what these expressions may introduce as subjects of discourse?

It seems that Russell is talking both about expressions and about logical subjects. He wishes on the one hand to

contrast " Scott " and " the author of Waverley ", and on the other to contrast Scott appearing as a logical subject with his not appearing as such.

Some sentences have names as grammatical subjects; in this passage Russell does not raise any of the questions he raises elsewhere about proper names but treats them as uncontroversial, as if they guaranteed the existence of corresponding objects. Some sentences have expressions like " the author of Waverley " as grammatical subjects, expressions which look like names and which are in fact concealed descriptions, carrying no guarantee of corresponding objects. What Russell seems to want is to have only proper names as grammatical subjects, so that to any grammatical subject there will correspond a logical one, expressions of the form ' the ( ) ' being analysed away.

Although the following quotation is not strong evidence for this interpretation, coming, as it does, some half-century later, it does tend to support it.

' The essential point of the theory was that, although " the golden mountain " may be grammatically the subject of a significant proposition, such a proposition, when rightly analysed, no longer has such a subject.'

My Philosophical Development, p.84.

The ambiguity of Russell's notion of ' subject ' consists in his not distinguishing the grammatical from the logical, and, correspondingly, not justifying his correlation of them.

Russell's position has changed from that of describing expressions of the form ' the ( ) ' as proper names. He had done this in The Principles ( p.502.) exactly as Frege did in ' On concept and object '. He now thinks that such expressions are propositional; or rather, he thinks that they ought to disappear on analysis, leaving no trace of their substantive character. His desire to see them go is shown not only by his saying that a proposition ' rightly analysed ' has no such subject, but by his saying that they have per se no meaning at all; for, of course, if ' the A ' really does mean ' one thing is an A; no two things are As; anything that is an A is ( ) ', then it does mean a good deal, and can, to some extent, stand on its own legs; it is only the part with the gap in it which is meaningless.

On the whole, Russell is very ambiguous in his attitude to ' the ' ; that is, he talks about its disappearance as something which is utterly important, indeed ' imperative '. He never talks about its reappearance; he never suggests that, having shown what it really means, we can leave it alone; his whole manner is that ' the ' should be got rid of wherever possible, as pernicious and misleading. The same goes for any grammatical subject which is not a proper name; the argument runs:- If it's not a proper name, what's it doing as a grammatical subject?

The fundamental reason for this is Russell's conflation of four things, or types, sentences, meanings, propositions



and objects of discourse. In accordance with Moore's old doctrine, the last three are identical; sometimes the sentence, or its pieces, are lumped in too; at other times they are regarded as mere signs or hints of the real thing. It is because the objects of discourse are the same as the meaning or meanings involved that the meaning of ' the author of Waverley ' is not the author of Waverley; it is because propositions are meanings that Russell will not admit that there may be a meaning without there being a proposition ( Frege's solution to this sort of difficulty ). Giving up either of those beliefs would permit him to retain the belief that ' the king of France ' is a referring expression, as it in fact is; its having meaning does not imply that we can, at any time, use it, but merely that we would know how to use it, if the occasion arose. Russell is quite right in saying that the meaning of ' the author of Waverley ' is not Scott; but the fact that we use the expression just like a name does not imply that Scott is its meaning. It is Russell's fault in identifying meaning with what is being spoken about. As Frege pointed out, we may use expressions with quite different meanings to indicate one and the same thing.

Is the king of France at any time an element in the proposition that the king of France is bald? My own opinion may be thought too severe, that he never is. In the first place, however, Russell does not advance two explanations of meaning, one to cover the case

where the king is a constituent, and the other to cover the case where he is not. In the second place, if we do not need the king on some occasions, we do not need him on others. We do not need to acknowledge the king, when we talk, quite sensibly, with the sentence ' The king of France is bald '; it is like not needing someone in the next room to make sense of the remark that there is someone in the next room. The truth is that, on Russell's theory, the king of France is never the logical subject of discussion, so long as that discussion is conducted in terms of such expressions as ' the ( ) '. In other words, even if it is true that the king of France is bald, you are not talking about him when you say, in any circumstances whatever, ' The king of France is bald '. The sentence does not give you that person as a logical subject at all.

It will probably be thought that mine is too strict an interpretation, that what Russell meant was that, if it were true that the king of France were bald, he would then be the logical subject; and if false, he would not be. This, I think, is to miss the whole point of the theory, which is to dispense completely with the need for a logical subject. Russell sees real logical subjects as things which give meaning to thoughts and propositions; they provide the occasion for propositions. ' The king of France is bald ' does not rely on such things; it has no logical subject.

A logical subject is something complete ignorance of which prevents our understanding assertions qua assertions; if we do not know who or what is meant, we are not in a position to agree or disagree with what is said; we are not even in a position to know whether there is anything to agree or disagree on. The effect of Russell's analysis is to remove this inability; you don't need to know who the king of France is, or even if there is such a person, to know that one can agree or disagree that something is a king of France, that no two things are kings of France and that any king of France is bald. The king of France is not a logical subject, so far as this complex statement is concerned, true or false.

' One interesting result of the above theory of denoting is this: when there is anything with which we do not have immediate acquaintance, but only definition by denoting phrases, then the propositions in which this thing is introduced by means of a denoting phrase do not really contain this thing as a constituent, but contain instead the constituents expressed by the several words of the denoting phrase. Thus in every proposition that we can apprehend ( i.e. not only in those whose truth or falsehood we can judge of, but in all that we can think about ), all the constituents are really entities with which we have immediate acquaintance.'

Logic and Knowledge, p.56.

This, of course, is Russell's famous distinction between knowledge by acquaintance and knowledge by description. Strictly speaking it is not a result of his theory of

definite descriptions, but an addition to it. The theory of definite descriptions covers certain existential conditions required, or not required, for certain sorts of meaning. This additional theory is intended to account for knowledge sufficient and necessary for making or understanding judgments. It implies that nothing with which we are not actually acquainted can occur as an element in any proposition we know. Yet, in some curious way, we can know of certain propositions, and of their truth, even if we cannot 'apprehend' them. We can talk about Caesar, for instance, although none of us is acquainted with him; he cannot occur in any proposition which we know, yet we know certain truths about him. What Russell says here, however, is not sufficiently amplified for us to understand the relations between the objects of acquaintance and the objects of thought. Quite evidently he wants to allow us to think about what we cannot actually perceive, relying on some sort of meaning relation between what we can perceive and what we cannot. That is the most we know, except that an object of thought can somehow be 'given' by a unique relation it has either to some one property or to a set of properties, which thus define it. There is some sort of epistemological equation between knowing the objects of acquaintance and the objects of thought, otherwise, according to Russell, one would not be able know, for instance, that Scott was the author of Waverley. But this does not amount to identity, or to an ontological



equation. Just how properties or universals 'give' us things is not considered. We are simply left with the thought that if we can't have Caesar himself in a proposition, we can have the things which correspond to the words used to define him. Presumably those who actually knew him, could have Caesar in their propositions; and those who knew Louis XVIII could have him as a propositional constituent. I do not think this means that he could have been a logical subject qua the king of France; if he was a logical subject, it was as Louis, pure and simple.

These epistemological considerations of meaning do not help us at all in understanding how the immediate objects of consciousness, when Scott himself is not a constituent of our propositions, give us information about Scott; what we are immediately aware of are concepts. We cannot be aware of their relation to Scott, presumably, since we cannot be aware of him; therefore, of what use are the concepts to us? Knowledge of concepts may be responsible for our understanding certain descriptions, but that is quite a different matter from being given a proposition. We may understand the expression 'the author of Waverley', but that does not, according to Russell, make it any easier to apprehend propositions about Scott himself; we know of those propositions, and that they are true ( or false ); the actual propositions themselves we do not know, since their constituents are

not within our range of acquaintance. The sort of proposition which we know of but do not know, contains such things as Scott and the minds of other people.

' Hence, although we can form propositional functions  $C(x)$  which must hold of such and such a material particle, or of So-and-so's mind, yet we are not acquainted with the propositions which affirm these things that we know must be true, because we cannot apprehend the actual entities concerned. What we know is ' So-and-so has a mind which has such and such properties ', but we do not know ' A has such and such properties ', where A is the mind in question. In such a case, we know the properties of a thing without having acquaintance with the thing itself, and without, consequently, knowing any single proposition of which the thing itself is a constituent.'

Op.cit., p.56.

How we can know of these propositions, let alone know their truth, when the actual propositions given us are conceptual in character, is not stated by Russell. This is one of the major problems examined in the Tractatus.

To return to ' Caesar died ' and ' Caesar's death ' or ' the death of Caesar '. According to The Principles of Mathematics, the same concept corresponds to both. Although this is what Russell thought, he found it hard to reconcile with the evident fact that the first expression gives us an assertion, while the second doesn't. His new analysis, he thinks, shows that ' the death of

Caesar ' really is assertive in character. ' Caesar died ' and the expression ' the death of Caesar ' are roughly equivalent, as follows:-

Caesar died = One thing, but not two, was a death and belonged to Caesar.

The death of Caesar = One thing, but not two, was a death and belonged to Caesar, and that thing...

The constituents of the complex which corresponds to both expressions depend on the meaning of the expressions. In any event, the actual death is not the logical subject of either. Russell thinks that the grammatical form of ' The author of Waverley was a man ' is misleading, since it suggests that something is the logical subject of the corresponding proposition. He does away with this difficulty by ' reduction ' of the expression to a level at which propositional functions, like ' x is human ', and denoting phrases, like ' something ', do all the work; at this level it is quite obvious that there are no names or referential expressions in the proposition, and therefore no need to explain its meaning in terms of anything but concepts, which, being timeless ( although he does not say this in the article ), do not pop into and then out of existence, like authors and kings.

There is a certain amount of doubt about the relations between things and concepts, and, correspondingly, objects of acquaintance and objects of thought. It is not clear

that something can be an object of thought and not of acquaintance. This depends on whether one can 'go' beyond those entities which give one's propositions meaning. On the one hand, Russell assumes that we do know about the centre of mass of the solar system, something we are not acquainted with, and on the other, he insists that we do not actually know those propositions of which the centre of mass is a constituent, because, to know those propositions we should have to actually be acquainted with the centre of mass. The propositions we actually know are those with whose meanings we are acquainted. The problem of explaining how we can have objects of thought which are not objects of acquaintance is just the problem of connecting concepts to things, and knowledge which is simply of concepts, to knowledge of things, a problem already noticed.

Earlier in this chapter ( p. 73 ), three questions of interest were noted:-

1. What are the elements of a proposition?
2. How can what corresponds to ' the death of Caesar ' also correspond to ' Caesar died '?
3. How can something both be a constituent of a propositional complex and at the same time give unity to the complex?



These were questions which lay behind some of the work in The Principles of Mathematics. Russell's answer to the first is essentially Moore's; the elements of the proposition are the elements of the meaning of the proposition, and these are the timeless concepts. To these Russell adds 'things' which can occur only as logical subjects and not as predicates. His answer to the second question is also the answer to the question of what it is that corresponds to expressions like 'the king of France'; this he gives in 'On denoting'. For his answer to the third question, we shall consider two pieces of work done at the end of the first decade of this century. That will complete our study of Russell as a prelude to our study of the Tractatus.

### Summary.

1. Russell accepts Moore's equation; instead, however, of

Concept = Meaning = Proposition

Russell suggests

Concept, or concept and thing = Meaning = Proposition.

At the same time he acknowledges the importance of the sentence, and unconsciously begins the process of reestablishing the identity of the proposition as distinct from its objects. This is shown by his talking about verbs as parts of propositions, along with predicates ( The Principles, Chapter 4.).

2. The Principles contains what amounts to a correspondence theory of language. Non-assertive

expressions are, fundamentally, names; either they correspond to concepts or to things; if they have meaning and correspond to things, this is because of a correspondence with concepts which somehow define the things. Assertive expressions are full propositions; they correspond to complexes of things and concepts. Russell does not know what to do with referential expressions like ' the death of Caesar ', since they look both like assertive and like non-assertive expressions.

3. Three questions, of importance in relating Moore and Russell to Wittgenstein, which occur in The Principles are:-

1. What are the elements of a proposition?
2. How can what corresponds to ' the death of Caesar ' also correspond to ' Caesar died '?
3. How can something both be a constituent of a propositional complex and at the same time give unity to the complex?

The first two of these questions, put together, make the subject matter of ' On denoting '. But the form of the question is, How can ' the death of Caesar ' have meaning, if there is no such object? Although he accepts Moore's equation, he cannot believe that there must always be a corresponding object; he therefore disagrees with Moore, and Meinong. Because he accepts Moore's equation, he disagrees with Frege; such expressions have meaning, and so there must somewhere be corresponding

objects. Russell assimilates such referential expressions to propositions which contain no expression naming things or particulars; all the names are names of concepts.

4. This solution creates the metaphysical problem of explaining the relation between things and concepts, and the epistemological one of accounting for knowledge of things purely in terms of concepts. Neither of those problems is actually formulated, let alone answered. Russell suggests that there is a type of proposition which cannot be 'apprehended' unless its constituents come within one's range of acquaintance, yet one can know of such propositions and of their truth or falsity. Such propositions would be expressed through proper names, not simply through concept-words.

5. Russell distinguishes the real form of a proposition from its apparent one, by analysing it, or reducing it, to something else. It is not clear whether he takes this process to be one of rectification or not, so far as actual language is concerned. We cannot say whether he thinks that the analysandum is intrinsically and perniciously misleading, or whether he merely wishes to show that its analysis is possible.

Chapter Three.

Russell has so far accepted Moore's identification of what we think about with what we mean, and of meaning with the judgment or proposition. Admittedly, in 1905, he is not happy about making meanings and objects of thought exactly the same; if he had any theory about this, which seems doubtful, it is by no means clear. What is interesting in his unease about the relation about the objects of thought and meaning, is his tendency to react to Moore's claim about the complete objectivity of the judgment. Our judgment is something we are actually aware of; its elements are objects of acquaintance; we must be conscious of them, otherwise we do not apprehend the proposition. The proposition is still independent of us; but if we are to mean that proposition, it must stand in a special relation to us. So there is one set of judgments which we may call our judgments and another set which we may simply call possible judgments. Even in 1905 then, Russell thought that if something was his judgment, he stood in some special relation to it. The turning point marked by this emphasis seems to have occurred about the time of his 1904 articles on Meinong, or shortly afterwards.

Between then and 1910 this emphasis is changed into the positive conviction that without mind there would be no judgments whatever. This does not mean that Moore's doctrine is given up entirely. Russell continues to believe



that the content of the judgment is fully objective and in no way dependent on the existence of mind, unless the judgment is actually about a mind, of course. His view becomes that the individual elements of judgment are somehow brought together in the judgment by the act of judging. Moore's supposition, that the judgment about this rose in fact contains the rose itself, is fully maintained, with the proviso, made in 1905, that the person judging is aware of the rose. The judgment is subjective, its content objective.

There is one other modification to Moore's theory, and this concerns truth. By 1910, Russell has decided that the truth of a judgment is not like the colour of a rose. Truth comes from correspondence, he feels; the correspondence of judgment and fact is what determines the truth-value of a judgment; if the one corresponds with the other, you have truth and if not, falsehood. No great imagination is required to see that so long as the elements of the judgment are precisely the same as those of the fact, or possible fact, the theory will run the danger of making judgments into facts, and thus of failing to allow for falsehood. It is on this difficulty that Russell's theory founders.

What is remarkable about the two analyses of truth which we are to consider, is the fact that Russell pays so little attention to sentences and language, or even thought. He

persists in discussing judgment at the level set by Moore in 1899. In spite of his reaction to the extreme objectivity of Moore, the most that Russell can achieve in reasserting the identity of judgment as something to compare or contrast with reality, is the inclusion of the judging mind in the judgment, the other elements being the things judged about or used in predication.

The first of the two analyses of truth which we shall consider occurs in the Philosophical Essays of 1910. We shall see how that third question noticed in The Principles, How can something both be a constituent of a proposition and give it unity?, forgotten by Russell in ' On denoting ', comes to dominate the discussion.

' On the nature of truth and falsehood ' opens in a typically Moorean way, by pointing out that the question ' What is Truth?' can be understood in various ways, and that the way in which Russell wants it to taken is not this way or that way, but as the question, What is the actual concept of truth?

' What we wish to do is to detach this concept from the mass of irrelevancies in which, when we use it, it is normally embedded, and to bring clearly before the mind the abstract opposition upon which our distinction of true and false depends. The process to be gone through is essentially one of analysis: we have various complex and more or less confused beliefs about the true and the false, and we have to reduce these to forms which are simple and clear

without causing any avoidable conflict between our initial complex and confused beliefs and our final simple and clear assertions.'

Philosophical Essays, p.171.

He continues by explaining that he is not interested in any criterion of truth i.e. something, but not truth itself, which a judgment or belief has as a guarantee of its truth, something like a trademark. He wants to know what actually constitutes the difference between truth and falsehood.

' The first point upon which it is important to be clear is the relation of truth and falsehood to the mind. If we were right in saying that the things that are true or false are always judgments, then it is plain that there can be no truth or falsehood unless there are minds to judge. Nevertheless it is plain, also, that the truth or falsehood of a given judgment depends in no way upon the person judging, but solely upon the facts about which he judges. If I judge that Charles I died in his bed, I judge falsely, not because of anything to do with me, but because in fact he did not die in his bed. Similarly, if I judge that he died on the scaffold, I judge truly, because of an event which in fact occurred 260 years ago. Thus the truth or falsehood of a judgment always has an objective ground, and it is natural to ask whether there are not objective truths and falsehoods which are the objects, respectively, of true and false judgments. As regards truths, this view is highly plausible. But as regards falsehoods, it is the very reverse of plausible; yet, as we shall see, it is hard to maintain it with regard to truths without being forced to maintain it also as regards falsehoods.'

Op.cit., p.173.

Russell's first two distinctions are between the

existence of the judgment and its truth, and between the judgment and the fact which makes it true or false. His next distinction is between perceptual or imaginative acts and acts of judgment. Does an act of judgment have an object, like a perceptual or imaginative act, or is it somehow more complicated?

What are the objections to the view that ' every judgment has an objective, and true judgments have true objectives, while false judgments have false objectives ' ? There are two:-

1. ' The first is that it is difficult to believe that there are such objects as " that Charles I died in his bed ", or even " that Charles I died on the scaffold " . '

Op.cit., p.175.

2. ' The second objection is more fatal, and more germane to the consideration of truth and falsehood. If we allow that all judgments have objectives, we shall have to allow that there are objectives which are false. Thus there will be in the world entities, not dependent upon the existence of judgments, which can be described as objective falsehoods. This is in itself almost incredible: we feel that there could be no falsehood if there were no minds to make mistakes. But it has the further drawback that it leaves the difference between truth and falsehood quite inexplicable. '

Op.cit., p.176.

The force of these objections is not very great, but evidently strong enough for Russell to reject the view which he himself had held in 1904.



' Thus we must turn to the theory that no judgment consists in a relation to a single object.'

Op.cit., p.177.

' The way out of the difficulty consists in maintaining that, whether we judge truly or whether we judge falsely, there is no one thing that we are judging. When we judge that Charles I died on the scaffold, we have before us, not one object, but several objects, namely, Charles I and dying and the scaffold. Similarly, when we judge that Charles I died in his bed, we have before us the objects Charles I, dying, and his bed. These objects are not fictions: they are just as good as the objects of the true judgment.'

Loc.cit.

' Thus in this view judgment is a relation of the mind to several other terms: when these other terms have inter se a "corresponding" relation, the judgment is true; when not, it is false.'

Op.cit., p.178.

' In saying that judgment is a relation of the mind to several things, e.g. to Charles I and the scaffold and dying, I do not mean that the mind has a certain relation to Charles I and also has this relation to the scaffold and also has it to dying. I do not, however, wish to deny that, when we are judging, we have a relation to each of the constituents of our judgment separately, for it would seem that we must be in some way conscious of these constituents, so that during any judgment we must have, to each constituent of the judgment, that relation which we may call "being conscious of it". This is a very important fact, but it does not give the essence of judgment. Nothing that concerns Charles I and dying and the scaffold separately and severally will

give the judgment " Charles 1 died on the scaffold ". In order to obtain this judgment, we must have one single unity of the mind and Charles 1 and dying and the scaffold, i.e. we must have, not several instances of a relation between two terms, but one instance of a relation between more than two terms.'

Loc.cit.

After some discussion about relations with more than two terms, and the nature of perception, he comes to an exact account of the correspondence on which truth depends.

' We may now attempt an exact account of the " correspondence " which constitutes truth. Let us take the judgment " A loves B ". This consists of a relation of the person judging to A and love and B, i.e. to the two terms A and B and the relation " love ". But the judgment is not the same as the judgment " B loves A "; thus the relation must not be abstractly before the mind, but must be before it as proceeding from A to B rather than from B to A. The " corresponding " complex object which is required to make our judgment true consists of A related to B by the relation which was before us in our judgment. We may distinguish two " senses " of a relation according as it goes from A to B or from B to A. Then the relation as it enters into the judgment must have a " sense ", and in the corresponding complex it must have the same " sense ". Thus the judgment that two terms have a certain relation R is a relation of the mind to the two terms and the relation R with the appropriate sense: the " corresponding " complex consists of the two terms related by the relation R with the same sense. The judgment is true when there is such a complex, and false when there is not. The same account, mutatis mutandis, will apply to any other judgment. This gives the definition of truth and falsehood.'

Op.cit., pps.183-4.

On this account, the judgment M makes, when he judges that A loves B, has seven elements. These are:-

1. M.
2. A.
3. B.
4. The relation of judging.
5. The 'sense' of the relation of judging.
6. The relation of loving.
7. The sense of this last relation.

These are not all ontologically distinct, obviously enough, since there could be no sense to a relation without the actual relation.

One would have thought that the person making the judgment would not form a part of it, since it is not about him. At several places, however, Russell says that it is a relation between the person and the various terms with which the judgment is concerned e.g. pps.180&183. Was he being careless? Did he mean the judging to have seven elements, but the judgment only four i.e. A, B, loving and the sense of loving? I do not think that this is carelessness, because what Russell does not want judgment to be is some complex to which the person judging is related; the judging complex does not contain some further complex, for that is the theory he began by discarding.

' Thus in perception I perceive a single complex object, while in a judgment based upon the perception I have the parts of the complex object separately though simultaneously before me.'

Op.cit., p182.

In judgment, therefore, M is not confronted with or related to his judgment, but is part of it. Perhaps one should say that there is no such thing as M's judgment; there is only his judging and what he judges; what he judges is not an entity, simple or complex, and does not in any way add to the world.

This must create some difficulty in understanding just what is meant by 'correspondence'. If the judgment, that A loves B, is true, A does love B. The fact that A loves B is a 'complex object' (op.cit., p.183.) which 'consists of A related to B by the relation which was before us in our judgment' (loc.cit.). It is this complex, correspondence with which makes the judgment true. What is this correspondence? Russell's use of quotation marks with the word 'correspondence' seems to indicate his awareness of its somewhat unusual appearance, in this context. For on the one hand, let us assume, we have the fact that A loves B, and on the other, the judgment that A loves B; on the one hand is a complex of four elements (including the sense of the relation of loving) and on the other, not a complex of four elements, but one of seven.

Let us call the fact 'F' and the judgment 'J'. Now there is certainly a kind of correspondence: to the occurrence of A, B and loving in F, there corresponds the occurrence of these same things in J, loving having the same sense in both. At the same time, nothing corresponds



to the complex F, unless it be J, for A, B and loving are not bound into any such complex; they only occur as parts of J. J cannot correspond to F, at least in structure, for it has at least two more elements than F. Either the intended correspondence is not between two complexes, or it is; if the intended correspondence is between two complexes, it must fail, since F and J do not correspond; if it is not between two complexes, it ought to be, because it is the occurrence of the fact, which is a complex, that is meant to explain the truth of J.

Let us imagine that some other person, N, judges that A loves B. Presumably Russell would not want to admit that M's judgment was true simply because there was a correspondence between the occurrence of A, B and loving in one complex, M's judgment, with their occurrence in some other complex, N's judgment, even if the sense of loving were the same. The correspondence must be between F and J; but this seems to be impossible. If the correspondence is simply one of occurrence, it fails to distinguish fact from judgment, since one judgment, with the objective ingredients of another, would make it true.

It may be felt that I have left out of account the 'sense' of the relation, which is the critical factor in allowing something to be a judgment without giving it the power to substantiate other judgments. That loving has a sense does not mean that some two things are in a

love relationship, although if some two things are in such a relationship, the relation must have a sense. It is important that sense, though a necessary condition, is not a sufficient one for the existence of an actual relationship, for, otherwise, the judgment that F would actually include F. What actually is 'sense' then?

'We may distinguish two "senses" of a relation according as it goes from A to B or from B to A.'

Op.cit., pps.183-4.

But how can the relation of loving go from A to B, in J, if it does not actually relate them? It occurs discretely and therefore does not go either from A to B or from B to A. That the relation has sense with respect to A and B must surely mean that A loves B or that B loves A; which sense it has depends on the facts. If neither loves the other, the relation is without sense. If the three things are presented separately, as they are in J, loving has no sense to it. That loving has a sense with respect to A and B is, therefore, a sufficient condition for its binding A and B in a love relationship.

It would seem quite clear that Russell wants two sets of inconsistent conditions to be satisfied; one is that there be some sort of inner complex to J, with elements A, B and loving, the other, that there is no such complex. This conflict appears greatest, naturally, when he is explaining the role of the objective relation.

' Let us take the judgment " A loves B ". This consists of a relation of the person judging to A and love and B, i.e. to the two terms A and B and the relation " love ". But the judgment is not the same as the judgment " B loves A "; thus the relation must not be abstractly before the mind, but must be before it as proceeding from A to B rather than from B to A.'

Op.cit., p.183.

There can be no complex inner to J, because Russell has ruled out the possibility that judgment is a relation of the mind to one single object; that is the theory he once held, and one accepted by both Moore and Meinong. This immediately creates the problem of giving a content to the judgment, since its elements all occur discretely, a problem already noticed by Russell in The Principles of Mathematics, p.49.

' Consider, for example, the proposition " A differs from B ". The constituents of this proposition, if we analyze it, appear to be only A, difference, B. Yet these constituents, thus placed side by side, do not reconstitute the proposition.'

The Principles, p.49.

It is therefore not enough to place the constituents ' side by side '. The relation of loving ' must not be abstractly before the mind, but must be before it as proceeding from A to B rather than from B to A.' What on earth does this mean? Surely, if the relation does not occur abstractly, it must occur concretely. That would make F an element of J; no judgment would then be false. When he says that the relation is before the mind,

does he mean that it is only before the mind, somehow implying that in reality, or the world of perception, there is nothing actually in front of him? The relation is 'before it (the mind)' as proceeding from A to B'; is this meant to suggest that it does not in fact 'proceed' from A to B? I suggest that Russell did not know what he meant exactly, because he could not reconcile the non-abstract occurrence of loving with not having some inner complex of the old Moorean sort. If the relation occurs abstractly, there is nothing to correspond to F; if it does not occur abstractly, it must occur concretely, and so J must include F; therefore no judgment is false, since F is what verifies J.

To describe the relation 'as proceeding' from A to B, is not really helpful. What we want to know is whether it does proceed from A to B or not. If it does, J includes F; if it doesn't, nothing corresponds to F.

Given any complex, let us distinguish between the relation which gives unity to it, and the terms which are bound by the relation. Let us allow that one of the terms may itself be a complex; but the terms of the second complex are not to be thought of as terms of the first. In theory, Russell does not want any term of the complex J to be itself a complex which might be called 'the judgment'; he therefore makes loving occur as a term of the complex J. At the same time he wants to give loving



an improved status so that it is not simply one term among others, but an ' active ' ingredient which somehow is not active enough to create a proper fact, only active enough to create a sort of pseudo fact.

The main reason for the lack of correspondence is, ultimately, that the elements of the fact, counting the relation as an element, are also elements of the judgment. It is thus impossible to group them together as a complex to which the fact may correspond, without actually creating the fact itself. So, either J includes F, in which case correspondence is ruled out, or nothing in J, and certainly not J itself, corresponds to F, and there is once again no question of correspondence. As long as the elements of the fact are also elements of the judgment, correspondence is going to be difficult or impossible.

This correspondence theory is not simply a theory of truth. It is also a theory of meaning. Indeed it is the theory of meaning originated by Moore, brought to bear on the problem of truth. As a theory of meaning it tries to explain how something is a judgment, and, as a theory of truth, how the judgment is true. According to the theory of meaning, judgment=meaning and meaning=objects of discourse. According to the theory of truth, J is true if J corresponds to F. If you put these two together, assuming that the elements of J are, in part at least, the elements of F, you reach the position occupied by Russell in the Philosophical Essays.

Other criticisms of his position may be made, the most important, perhaps, being that the relation of judging is surely worth much more explanation than is given. How does it differ from supposing, denying and so on? What is its relation to language? There is no real need to bring our scrutiny to bear on these points; Russell's attitude to them is one of confident indifference.

' The same account, *mutatis mutandis*, will apply to any other judgment.'

Op.cit., p.184.

The following is a summary of the main criticisms of his theory:-

1. Russell makes the judgment that A loves B include the person who makes the judgment. He ought surely to distinguish the judgment from its being judged. ' Let us take the judgment " A loves B ". This consists of a relation of the person judging to A and love and B.' ( Op.cit., p.183.) The judgment itself can hardly include the person who makes it.
2. Given the fact that A loves B, one is given a complex consisting of A, loving and B. If someone judges that A loves B, this judgment is true, because of a correspondence between the fact and the judgment. However, the fact cannot correspond to the judgment, since it has fewer elements; and it cannot correspond to some complex in the judgment, since the judgment does not

contain a complex. There is no correspondence therefore, between the fact and the judgment. If the correspondence is simply that of the occurrence of A, B and loving in one complex, and then in another, a judgment would be verified by any other judgment having the same objects.

3. In the judgment, loving occurs ' as proceeding from A to B '. It does not occur abstractly. Either it proceeds or it does not; either it occurs abstractly or it occurs concretely. If it occurs concretely, the fact which verifies the judgment is contained within it, and no judgment is false. If loving proceeds from A to B, once again, the fact is contained within the judgment.
4. In the judgment, loving has a sense; the sense of the relation is determined by its going from A to B, or from B to A. Therefore, unless the judgment contains A's loving B i.e. the fact that A loves B, loving does not have the sense of going from A to B. If it can only have a sense in going from one to the other, the fact is contained in the judgment, and, once again, no judgment is false.
5. Not nearly enough is said about judging to distinguish it from supposing, imagining etc, or to link it with language.

Conclusion:- This theory either does not provide a judgment which corresponds to fact, or makes fact a part of judgment.

Russell provides a further treatment of the same problem in 1912 in that wonderful introduction to philosophy, The Problems of Philosophy. Perhaps it is thought unfair to criticise the work in two volumes both of which were intended for non-philosophers. I do not think that this is so, for these criticisms would not have been met, I believe, by a fuller explanation from Russell.

This second treatment of the problem of truth is very similar to the one already examined by us. Indeed, if there is any difference at all, it is marginal. Nevertheless, I think it does indicate Russell's awareness that all was not well with what he had said in the Philosophical Essays, for he introduces a new term, that of 'order', which is closely linked to 'sense', a term we are already familiar with. Furthermore, he does mention sentences here, and the order of their words. His approach is therefore more sophisticated.

After the customary preliminaries about what question he is really interested in, Russell lists the three main points which any theory of truth must acknowledge and explain. These are:-

1. That there are falsehoods as well as truths.
2. That a world 'of mere matter' would contain



' facts ', but neither truths nor falsehoods.

3. That although truths and falsehoods presuppose the existence of mind, the actual truth-value depends on things ' outside ' belief itself.

The Problems of Philosophy, pps.188-9.

Having suggested that the third point implies some sort of correspondence theory of truth, he briefly considers the coherence theory, which he rejects. His next topic is the familiar one of whether or not a ' belief consists in a relation to a single object '. That belief is of this sort goes against the first point made, since all beliefs would then be true.

' Hence it will be better to seek for a theory of belief which does not make it consist in a relation of the mind to a single object.'

Op.cit., p.194.

He briefly explains how some relations may have more than two terms and then comes to a description of what takes place when Othello believes that Desdemona loves Cassio.

' The relation involved in judging or believing must, if falsehood is to be duly allowed for, be taken to be a relation between several terms and not between two. When Othello believes that Desdemona loves Cassio, he must not have before his mind a single object, " Desdemona's love for Cassio ", or " that Desdemona loves Cassio ", for that would require that there should be ob-

jective falsehoods, which subsist independently of any minds; and this, though not logically refutable, is a theory to be avoided if possible. Thus it is easier to account for falsehood if we take judgment to be a relation in which the mind and the various objects concerned all occur severally; that is to say, Desdemona and loving and Cassio must all be terms in the relation which subsists when Othello believes that Desdemona loves Cassio. This relation, therefore, is a relation of four terms. since Othello also is one of the four terms of the relation....Thus the actual occurrence, at the moment when Othello is entertaining his belief, is that the relation called "believing" is knitting together into one complex whole the four terms Othello, Desdemona, loving and Cassio.'

Op.cit., pps.195-7.

So far there is no difference with what was said in the Philosophical Essays. What follows is slightly different.

' We are now in a position to understand what it is that distinguishes a true judgment from a false one. For this purpose we will adopt certain definitions. In every act of judgment there is a mind which judges, and there are terms concerning which it judges. We will call the mind the subject in the judgment, and the remaining terms the objects. Thus, when Othello judges that Desdemona loves Cassio, Othello is the subject, while the objects are Desdemona and loving and Cassio. The subject and the objects together are called the constituents of the judgment. It will be observed that the relation of judging has what is called a "sense" or "direction". We may say, metaphorically, that it puts its objects in a certain order, which we may indicate by means of the order of the words in the sentence. ( In an inflected language, the same thing will be indicated by inflections, e.g. by the difference between nominative and accusative.) Othello's judgment that Cassio loves Desdemona differs from his

judgment that Desdemona loves Cassio, in spite of the fact that it consists of the same constituents, because the relation of judging places the constituents in a different order in the two cases. Similarly, if Cassio judges that Desdemona loves Othello, the constituents of the judgment are still the same, but their order is different. This property of having a "sense" or "direction" is one which the relation of judging shares with all other relations. The "sense" of relations is the ultimate source of order and series and a host of mathematical concepts; but we need not concern ourselves further with this aspect.'

Op.cit., pps.197-9.

The difference between this account and the one in the Essays is that whereas the latter account made the sense of loving critical, the former, i.e. the one in The Problems, mentions only the sense of judging and does not mention the sense of loving at all. Instead of talking about the sense of loving, Russell talks about the 'order' of objects, both in the judgment and in the fact which corresponds with the judgment.

We are told that sense is the source of order. It is not clear whether a relation in the abstract has sense or not. It seems evident that objects, as terms of some relation, are not ordered in the abstract. A set of objects is only ordered when its members are the terms of some relation. The relation puts the terms in some order and this ability constitutes its having sense. The same set of objects can be put in a different order by the same relation; does the relation have the same sense, even if the order changes? Does the relation have as many senses as there are ways

of ordering a given set of objects? This is what Russell meant in the Essays; given two possible terms and the relation of loving, there would be two possible senses, one being A's loving B, and the other, B's loving A. Accordingly, the senses of judging would be the various ways in which a given set of objects could be disposed in judging complexes. Unfortunately, it would seem to be impossible to determine exactly what Russell meant, particularly since he only talks about 'sense' and not 'senses'.

The order of a set of objects depends on their being related in one complex. A set of objects may be ordered in various ways; or they may be ordered in the same way by different relations; and different sets of objects may be ordered in the same way, e.g. words and objects of discourse. Once again, as with the concept of sense, what exactly Russell means is not at all clear. Nothing he says is a direct answer to the question, What is the order of objects in the judgment Othello makes that Desdemona loves Cassio? He merely says that their order is not the same in Othello's judgment that Cassio loves Desdemona. He cannot say that in one case Desdemona loves Cassio and in the other Cassio loves Desdemona, because in the judgment neither loves the other. He cannot say that on the one hand Desdemona is judged to love Cassio while on the other Cassio is judged to love Desdemona; because the order of Desdemona and Cassio is abstracted



from the particular relation of judging.

The concept of order is not a specifically technical one; we are familiar with putting things back in the same order as we found them, with alphabetical order, order of merit and so on. The order of objects is some uniform arrangement of objects within a homogeneous system such that each object has a ' position ' and, in general, no two objects occupy the same position. The positioning of an object requires some kind of asymmetry which operates on each object and some other object.

The order of a set of books will depend on one being to the left of all the others, with this book coming next, and so on. The order of weight of, say, four people, is Jones being heavier than the rest, Smith heavier than at least two others, then Williamson, with Graham the lightest; so each person occupies a position in order of heaviness.

It is possible to have more than one object in one position, but in general there must be a variety of positions. It is possible to do without a ' first ' position, and for some two objects not to be directly related by the operative relation, e.g. the order of those seated round a dining-table. It is possible to have only two objects ordered in some way, e.g. in order of weight. What is not possible, however, is

that objects be ordered without being related in some particular respect by an asymmetrical relation. A's being the brother of B and C does not give A, B and C any order whatever, since being the brother of someone is not an asymmetrical relation. Similarly, A's loving B, even if B does not love A, does not order A and B; there is nothing asymmetrical about loving. Loving A more than B does give an order, in respect of the relation of being loved more than. Love on its own does not, however. Nor does judging, so far as I can see. It is surely nonsense to say that if Othello judges that Desdemona loves Cassio, first comes Othello, then Desdemona, followed by loving, with Cassio at the end. In what respect does Desdemona ' follow ' Othello? In time? What is it at whose end Cassio comes? It simply does not make sense. Before giving a final assessment of ' order ', let Russell state his correspondence theory in greater detail.

' We spoke of the relation called " judging " or " believing " as knitting together into one complex whole the subject and the objects. In this respect, judging is exactly like every other relation. Whenever a relation holds between two or more terms, it unites the terms into a complex whole. If Othello loves Desdemona, there is such a complex whole as " Othello's love for Desdemona ". The terms united by the relation may be themselves complex, or may be simple, but the whole which results from their being united must be complex. Wherever there is a relation which relates certain terms, there is a complex object formed of the union of those terms; and conversely, wherever there is a complex object, there is a relation which relates its constituents. When an act of believing occurs, there is a complex, in which " believing " is the uniting relation, and subject and objects are arranged in a certain order by the " sense " of the

relation of believing. Among the objects, as we saw in considering "Othello believes that Desdemona loves Cassio", one must be a relation - in this instance, the relation "loving". But this relation, as it occurs in the act of believing, is not the relation which creates the unity of the complex whole consisting of the subject and the objects. The relation "loving", as it occurs in the act of believing, is one of the objects - it is a brick in the structure, not the cement. The cement is the relation "believing". When the belief is true, there is another complex unity, in which the relation which was one of the objects of the belief relates the other objects. Thus, e.g., if Othello believes truly that Desdemona loves Cassio, then there is a complex unity, "Desdemona's love for Cassio", which is composed exclusively of the objects of the belief, in the same order as they had in the belief, with the relation which was one of the objects occurring now as the cement that binds together the other objects of the belief. On the other hand, when a belief is false, there is no such complex unity composed only of the objects of the belief. If Othello believes falsely that Desdemona loves Cassio, then there is no such complex unity as "Desdemona's love for Cassio".

Thus a belief is true when it corresponds to a certain associated complex, and false when it does not. Assuming, for the sake of definiteness, that the objects of the belief are two terms and a relation, the terms being put in a certain order by the "sense" of the believing, then if the two terms in that order are united by the relation into a complex, the belief is true; if not, it is false. This constitutes the definition of truth and falsehood that we were in search of. Judging or believing is a certain complex unity of which a mind is a constituent; if the remaining constituents, taken in the order which they have in the belief, form a complex unity, then the belief is true; if not, it is false.'

Op.cit., pps.199-201.

' We may restate our theory as follows: If we take such a belief as "Othello believes that Desdemona loves Cassio", we will call Desdemona and Cassio the object-terms, and loving the object-relation. If there is a complex unity "Desdemona's love for Cassio", consisting of

the object-terms related by the object-relation in the same order as they have in the belief, then this complex unity is called the fact corresponding to the belief. Thus a belief is true when there is a corresponding fact, and is false when there is no corresponding fact.'

Op.cit., p202.

It is obvious how similar this account is to the one considered earlier. The only difference seems to be the introduction (a) of the sense of judging, which takes the place of the sense of loving, and (b) of the order of objects, whose role appears to remedy the fault created by relying on the sense of loving. This theory allows judging a sense, in the judgment, but not the object-relation of loving, presumably because, if loving has a sense, somebody actually loves someone. Judging has a sense, because it connects the constituents of the judgment into a complex.

If Desdemona in fact loves Cassio, there is a complex unity consisting of these two people related in a certain order by the relation of loving. It is this fact whose correspondence with Othello's belief that Desdemona loves Cassio, makes that belief true.

The first thing which Russell means by correspondence is simply that it is a fact which makes the judgment true; so that if some fact F corresponds to some judgment J, J says that F. This may be the principal part of his meaning. At the same time, he holds that there is what might be



called a ' structural ' correspondence between F and J which is a similarity in the way their constituents are ordered or put together. There are therefore two kinds of correspondence here, one which relates to the inner similarity of two complexes whose constituents have the same order, and the other which, relying on this inner similarity and on the identity of the constituents, is the correspondence of this judgment with this or that fact. The inner similarity is a formal one, in the sense that different relations can produce the same order; order is formal, in being abstract. Order would seem to be independent of any given set of objects, since the order of words in a sentence can indicate the order of a given set of objects ( op.cit., p.198.)

The judgment, or belief, ' Othello believes that Desdemona loves Cassio ', seems to have the following elements, which are not all ontologically distinct:-

1. Othello.
2. Desdemona.
3. Cassio.
4. The relation of judging.
5. The sense of this relation.
6. The relation of loving.
7. The order of Othello, Desdemona, Cassio and loving, according to the sense of judging.

But that is not all, because we have not included the order of elements to be found also in the fact which makes the judgment true. This order cannot be item 7, which

includes elements having no place in the fact.

' Judging or believing is a certain complex unity of which a mind is a constituent; if the remaining constituents, taken in the order which they have in the belief, form a complex unity, then the belief is true; if not, it is false.'

Op.cit., p.201.

' The remaining constituents ' are Desdemona, Cassio and loving. However, there is a further order to be reckoned with; the fact consists ' of the object-terms related by the object-relation in the same order as they have in the belief ' ( op.cit., p.202.). ' They ' presumably refers to the object-terms, not the object-relation. Indeed, how could a relation order both its terms and itself? If we are to interpret Russell strictly, we must include eighth and ninth elements, in the judgment.

8. The order of Desdemona, Cassio and loving.
9. The order of Desdemona and Cassio.

The theory with which we are presented is not just that a judgment is true if what it states is a fact. That would be a very weak correspondence theory. Russell's is much stronger than this. The sort of correspondence he suggests is between the fact, as a complex, and the judgment as a complex; the two things correspond internally. He tried to effect this ' strong ' correspondence by the sense of the object-relation; this is the theory in the Essays, and it is not a successful one. He now suppresses the sense of

loving, in favour of order; this does not mean that loving has no sense, since it is presumably just this which is responsible for the order of Desdemona and Cassio in the fact that Desdemona loves Cassio. The internal similarity between fact and judgment is now one of order, and what one might call the 'material' content of the judgment is completed by its containing the actual objects of discourse. Is this new version any better than the old?

In general, I would say that this theory is not any more successful than its predecessor. That is because it does not solve the original problems, which were (a) to explain why some particular judgment is true or false as the case may be, and (b) to explain how this thing is a judgment in the first place, and, in particular, the judgment that p, or whatever. The answer to (a) depends on the answer to (b), and I do not think that Russell has yet given the right answer to (b).

The main fault in his account is that he has not really shown what corresponds with the fact. This is because he does not want the judgment to include some further complex, cannot make the entire judgment correspond with the fact and yet must have some complex to correspond with the fact. To be 'given' a complex by a judgment, on his type of theory, requires some parallel judgment-complex; it is neither the judgment, which has elements not occurring in the fact, nor some complex in the judgment, for Russell

makes ' the various objects concerned all occur severally ' ( op.cit., p.196.). He tries by the device of ' order ' both to have a complex in the judgment, and not to have one. But, in the first place, if Desdemona, loving and Cassio are ordered, they must be bound in some relationships which concern their relative positions, thus creating at least one complex within the judgment. Secondly, the order in the fact is only of Desdemona and Cassio; hence the order of loving with respect to these two is irrelevant to the fact and need not form part of the judgment. Thirdly, since objects can be ordered in a judgment without being so ordered in some complex which is not a judgment, their mere order cannot fully account for the make-up of the fact which would make the judgment true. Fourthly, even if we allow that A judges that p expresses an asymmetrical relation between A and some other thing, it surely does not assign positions to the things judged about, as a matter of course; and surely A is not ordered in relation to B simply by loving B.

The cause of the trouble is still More's equation which makes the elements of the proposition, the elements of the meaning and the elements of the fact all the same set of things. If you do this, it will be impossible to distinguish facts from propositions from meanings. The difficulty of this position first manifests itself as Russell's inability to reconstitute the elements of the fact into something which is not that fact. Once he has broken down the fact and taken the elements, he either puts the elements



together to make the fact a part of the judgment, as he did in the Essays, or he puts them together to make something which is ' bigger ' than the fact and does not, therefore, correspond with it.

The following is a summary of the main criticisms of the amended version of the correspondence theory of the Philosophical Essays:-

1. The theory claims that there is a correspondence between judgment and fact, but does not substantiate this claim. The judgment is always more complex than the fact, and so cannot correspond with it; nor does it contain some complex which corresponds with the fact. There is therefore no correspondence between judgment and fact.
2. The resort to order is fruitless, because the act of judging does not assign positions like ' heavier than ' or ' first ' as a matter of course to its objects, and so does not necessarily give them any order. Furthermore, either the ordering includes the object-relation and so is not the order of the fact, or excludes it and says nothing about what actual relation, outside the judgment, the objects are in.

Conclusion:- The theory does not show correspondence between judgment and fact.

What Russell has offered us, although he does not put it in this way, is a correspondence theory of truth and meaning. Every judgment has a meaning; that is because every judgment is about objective things which give it meaning. These objective things, in fact, are meanings. When we talk about Scott, we mean Scott; when we talk about Scott's being an author, we are talking not only about Scott but about the property of being an author and the relation between Scott and that property.

These individual things give point to our individual words, if these words are names. If you put these words together, using denoting expressions like ' something ' or ' everything ' ( Logic and Knowledge, p.42.) you will express propositions. If you choose, you may avoid expressions like ' something ' by just using proper names and words for universals or relations.

The propositions which we express through sentences correspond to beliefs and judgments. There are two sorts of correspondence between judgment and fact, a strong and a weak. The strong correspondence holds through the internal similarity of judgment to fact; this internal similarity has a purely formal aspect, called ' order ' and of a relational character; the material content of the judgment is completed by the numerical identity of the elements of the judgment and those of the fact. The weak correspondence consists in the fact that facts make judgments true, irrespective of how they make them true.

What Russell's theory says, but cannot substantiate, is that judgment and fact are made from the same elements, metaphysically speaking; that both are fundamentally relational in character; that both a judgment and the corresponding fact share an abstract relational property called ' order '.

His theory does not say, but surely implies, that whereas the meaningfulness of a judgment requires its having a certain structure and elements to which the ' order ' and elements of some fact could correspond, actual correspondence is only required for the truth, not the meaningfulness, of the judgment.

What stands in the way of Russell's giving an intelligible account of judgment, whether true or not, is his wanting to have two corresponding complexes, each with the same elements. Wittgenstein's Picture Theory solves this difficulty by making the elements of the complexes merely similar, rather than identical.

We shall see that Wittgenstein's Picture Theory, while holding the basic assumptions of Russell's theory of judgment, goes further in establishing, or reestablishing, the identity of the proposition, an identity obliterated in the first instance by Moore in 1899.

### Summary.

1. Russell gives up the Moorean assumptions that the existence of judgment is independent of mind and that the truth-value of a judgment is related to it as the colour of a rose is to it. He suggests that judgment is based on correspondence, and although his theory is a correspondence theory of meaning and truth, he calls it a correspondence theory of truth.

2. In the seventh of the Philosophical Essays he describes judgment as a multiple relation whose terms are the judging mind and the objects of thought. These are bound together by the relation of judging. That this is a judgment depends on the possibility of its corresponding with the fact which would make it true. The fact is a complex, made up of the objects of thought, one of which is a relation which binds the other objects together. The 'sense' of this relation has to be the same in both complexes, the judgment and the fact which verifies it. The principal difficulty with this theory is that either there is no correspondence, except in the weakest sense, between the judgment and the fact, because the fact has fewer elements than the judgment; or there is no correspondence because the judgment contains the fact.

3. In the twelfth chapter of The Problems of Philosophy



he presents a slightly different version of the theory in the Essays. The principal difference is that the object-relation, the one operative in the fact which makes the judgment true, does not, as it occurs in the judgment, have an actual sense; it occurs purely as a term or constituent in the judgment and is not in any sense active. The correspondence between the judgment and the fact, assuming that the elements of the fact are included in the judgment, is the abstract relational one of 'order'. But, once again, the judgment is too complex to correspond with the fact; and it contains no complex which could correspond with the fact, since all the objects occur severally, rather than in some 'inner complex'.

4. The principal reason for the failure of Russell's theory, even within the context which he sets himself, of one complex corresponding with another, is his making the elements of the judgment exactly the same as the elements of the fact, at least in part. His attempt to reestablish the identity of the proposition or judgment, following Moore's denial of the distinction between judgment and the objects of thought, is vitiated by his acceptance of Moore's equating the objects of thought with meanings with the elements of judgment.

5. We shall see, it is hoped, that Wittgenstein's Picture Theory provides one way out of Russell's difficulty, while retaining the Russellian assumptions that judgment

corresponds with fact, both for meaning and for truth; that the elements of fact are in some sense the same, metaphysically, as the elements of judgment; that fact and judgment are fundamentally relational; that a judgment and its corresponding fact share an abstract relational form, which Russell calls 'order' and which is somehow given with actual relations, but is not tied to any particular one.

to Russell.

The two predecessors most useful to keep in mind in reading the *Treatise* are a mathematician and a physiologist, Frege and Heinrich Hertz.

Frege's Logical Notion, p. 5; J. Griffin.

A true index of the relative value of these men in helping us to understand Wittgenstein is given by the relative frequency with which they are mentioned: Hertz is mentioned twice, Frege about eighteen times and Russell about twenty-eight times; in the *Treatise*, that is.

One cannot, of course, say just one for Wittgenstein and ignore Frege, even if he acknowledges a debt, as he does in the preface to the *Treatise*. That is a biological question which it is not our business to settle. The work that will be done in fact is to show the similarities and differences between the treatments of the problem of truth and meaning. Let us not be misled by the tone of Wittgenstein's letter when he is speaking about Russell. At least it is, at

### Chapter Four.

It is no doubt true that Wittgenstein owed something to Heinrich Hertz, as James Griffin says in his book on the Tractatus; however Griffin's coupling Hertz and Frege as the two most important sources for understanding that work is not only an exaggeration but something of an injustice to Russell.

' The two predecessors most useful to keep in mind in reading the Tractatus are a mathematician and a physicist, Frege and Heinrich Hertz.'

Wittgenstein's Logical Atomism, p.5: J. Griffin.

A truer index of the relative value of these men in helping us to understand Wittgenstein, is given by the relative frequency with which they are mentioned: Hertz is mentioned twice, Frege about eighteen times and Russell about twenty-eight times; in the Tractatus, that is.

One cannot, of course, say just how far Wittgenstein was indebted to Russell, even if he acknowledges a debt, as he does in the preface to the Tractatus. That is a biographical question which it is not our business to settle. The most that will be done in that direction is to show the similarities and differences between their treatments of the problems of truth and meaning. And let us not be misled by the tone of Wittgenstein's voice when he is speaking about Russell; although it is, as

a rule, critical, that does not imply a disagreement about fundamental assumptions. There is disagreement on some fairly important questions, e.g. on what the basic elements of reality, and therefore the proposition, can be; on whether a judgment includes the mind or not; on whether a relation can be named; about how restrictions operate on the possible values of variables, but, in spite of this, there is, in my opinion, a very deep agreement about the structure of the proposition and its relation to reality.

It is perhaps best to begin with the Notebooks 1914-16 rather than with the Tractatus itself, which does not offer us quite the same candid viewpoint, presenting, as it does, a finished theory, whose sketchbook the Notebooks is. We will also make use of the notes which appear as appendices in Blackwell's edition of the Notebooks. Of these two sets of notes, according to Anscombe, Rhees and von Wright, the editors of the Notebooks, one was 'composed in 1913 and given to Russell, and the other dictated to G. E. Moore in Norway in 1914' ( Notebooks, p.v.). Following a suggestion made to them by Griffin, the editors believe that the version of the 1913 notes published by them, was made by Wittgenstein himself ( *op.cit.*, p93.). A third appendix, to which some reference will be made, contains scraps of letters from Wittgenstein to Russell.



Let us look first at some criticisms Wittgenstein makes of Russell, in the 1913 notes. The ones of particular interest to us concern 'atomic' propositions, or negated atomic propositions. Here are five:-

1. Wittgenstein criticises Russell's assertion that propositions correspond to complexes.

' Frege said " propositions are names "; Russell said " propositions correspond to complexes ". Both are false; and especially false is the statement " propositions are names of complexes ". Facts cannot be named. The false assumption that propositions are names leads us to believe there must be " logical objects ": for the meaning of logical propositions would have to be such things.

What corresponds in reality to a proposition depends upon whether it is true or false. But we must be able to understand a proposition without knowing if it is true or false. What we know when we understand a proposition is this: we know what is the case if it is true and what is the case if it is false. But we do not necessarily know whether it is actually true or false.'

Op.cit., pps.93-4.

Russell had said that the terms in a relation may be complex ( The Problems, p.199.) and yet occur as terms; such things could even be named, e.g. Othello, presumably. But, so far as we have seen in our study of him, he is certainly not open to the charge of confusing propositions with names; on the contrary, he is acutely aware of the fact that something must correspond to a name, whereas nothing need correspond to a proposition. That is one of

the main points of ' On denoting '. Admittedly, Russell's theory of judgment is a correspondence theory. It does not demand, however, that some complex must correspond to each judgment or proposition, in order for that proposition or judgment to exist; actual correspondence is only required to make the judgment true, not to give it sense or meaning. The *raison d'être* of Russell's theory is the abolition of the corresponding complex except to explain the actual truth-value.

2. Wittgenstein criticises Russell's confusion of the assertion of a proposition with the proposition itself.

' The assertion-sign is logically quite without significance. It only shows, in Frege and in Whitehead and Russell, that these authors hold the propositions so indicated to be true. "⊢", therefore, belongs as little to the proposition as ( say ) the number of the proposition. A proposition cannot possibly assert of itself that it is true. Assertion is merely psychological. There are only unasserted propositions. Judgment, command and question all stand on the same level; but all have in common the propositional form, and that alone interests us. What interests logic are only the unasserted propositions.'

Op.cit., p.96.

We recall Russell's discussion in The Principles of Mathematics on the relation between assertion and the proposition; at that time he thought that assertion was somehow given with true propositions. His later theory implies a necessary connection, not between true prop-

ositions and asserted ones ( The Principles, p.504.), but between the judgment, that A loves B, and somebody's judging that A loves B. The later theory does not distinguish the judgment from its being judged, the content of the judgment from its existence as something done by someone, because of the complete identification of the objects of discourse with at least some of the elements of the judgment. To distinguish the judgment from its being judged would commit Russell to a complex indistinguishable from the fact which would make the judgment true, since the elements of both would be identical.

Wittgenstein's criticism is perfectly fair: the assertion of a proposition, the making of a judgment, are quite distinct from the proposition or judgment-content. At the same time he recognises the difficulty of explaining how the proposition is related to the person who asserts it.

' The proposition " A judges ( that ) p " consists of the proper name A, the proposition p with its two poles, and A's being related to both these poles in a certain way. This is obviously not a relation in the ordinary sense.'

Loc.cit.

Therefore, although he disagrees with Russell's making a proposition in some sense part of its being asserted, he agrees that if A judges that B loves C, this is not simply a relation between A and the proposition that B loves C.

3. He criticises Russell's theory of judgment, because

it seems to him, it permits nonsensical judgments.

' Every right theory of judgment must make it impossible for me to judge that " this table penholders the book " ( Russell's theory does not satisfy this requirement.)'

Loc.cit.

It is not clear to me why Wittgenstein makes this criticism either in this particular context, in which he is discussing the general relational character of judgment, or in any place at all. According to Russell's theory, the elements of the judgment are, apart from the subject and the judging relation, things which may go together to form a fact. There could be no correspondence if this were not so. Nonsensical judgments are therefore impossible, since nothing could correspond to them.

4. A proposition is not entirely relational; nor are the things it expresses, even if these are factual. So Russell's theory, Wittgenstein thinks, is wrong by being too simple-minded.

' One reason for supposing that not all propositions which have more than one argument are relational propositions is that, if they were, the relations of judgment and inference would have to hold between an arbitrary number of things. The idea that propositions are names for complexes has suggested that whatever is not a proper name is a sign for a relation. Russell, for instance, imagines every fact as a spatial complex, and since spatial complexes consist of things and relations only, therefore he holds all do.'



Loc.cit.

' It is wrong to conceive every proposition as expressing a relation. A natural attempt at such a solution consists in regarding " not-p " as the opposite of " p ", where, then, " opposite " would be the indefinable relation.'

Op.cit., p.97.

Wittgenstein's objections here are not clear. One of them, from the second quotation, seems to be that if you express the proposition that not-p, you are not simply expressing a relation between the proposition that p and its contradictory. The function of ' not ' is not to name a relation.

This is stated in a general way in the second sentence of the first quotation, which, with the following statement about Russell's view of facts as spatial complexes, is, I think, a comment on the over-naivety both of Russell's metaphysics and of his theory of judgment.

The first sentence of the first quotation seems to be saying that one reason for not wanting propositions to be relational is that if someone judges, or infers, that proposition, it is the proposition and not some set of things, which is judged or inferred. What is not obvious is whether Wittgenstein accepts this reason or not.

At any rate, he is quite right to criticise Russell's

extravagant application of a relational analysis to everything.

5. Russell's theory demanded that the relation which occurs in the fact as a relation, should occur in the judgment as a term, along with those things which, in the fact, are its terms; so that sometimes terms, on their own, are ordered, and sometimes they are ordered with the relation. Wittgenstein's comment is that

' There is no thing which is the form of a proposition, and no name which is the name of a form. Accordingly we can also not say that a relation which in certain cases holds between things holds sometimes between forms and things. This goes against Russell's theory of judgment.'

Op.cit., p.99.

An atomic proposition consists of names and a form; a name is quite unlike a form. The form of an atomic proposition is that in the proposition which corresponds to, but does not name, some specific relation which holds or does not hold between the things named. The form of the proposition is what turns a mere set of names into a proposition.

' Indefinables are of two sorts: names and forms. Propositions cannot consist of names alone, they cannot be classes of names.'

Op.cit., p.98.

' A proposition must be understood when all

its indefinables are understood. The indefinables in "aRb" are introduced as follows: (1) "a" is indefinable, (2) "b" is indefinable, (3) whatever "x" and "y" may mean, "xRy" says something indefinable about their meaning.'

Loc.cit.

' The form of a proposition may be symbolized in the following way: Let us consider symbols of the form "xRy", to which correspond primarily pairs of objects of which one has the name "x", the other the name "y". The x's and y's stand in various relations to each other, and among other relations the relation R holds between some but not between others. I now determine the sense of "xRy" by laying down the rule: when the facts behave in regard to "xRy" so that the meaning of "x" stands in the relation R to the meaning of "y", then I say that these facts are "of like sense" (gleichsinnig) with the proposition "xRy"; otherwise, "of opposite sense" (entgegengesetzt). I correlate the facts to the symbol "xRy" by thus dividing them into those of like sense and those of opposite sense. To this correlation corresponds the correlation of name and meaning. Both are psychological. Thus I understand the form "xRy" when I know that it discriminates the behaviour of x and y according as these stand in the relation R or not. In this way I extract from all possible relations the relation R, as by a name, I extract its meaning from among all possible things.'

Op.cit., pps.98-9.

Although this is criticism of Russell's theory, it reminds us very much of it, particularly when Wittgenstein talks about the 'sense of "xRy"'. What Russell meant by 'sense' was the ways in which objects could be related by some particular relation. What Wittgenstein

means is different; the sense of "  $xRy$  " is its capacity to institute a division between those things which are related by relation  $R$ , and those things which are not. There is no suggestion that a relation may have different ' senses '.

Also, Wittgenstein's ' form of a proposition ' reminds us of Russell's attempt to find in his judgment-complex something which would represent the relation in the corresponding fact; Russell tried to explain this aspect of the correspondence in terms of ' sense ' or ' order ' and the actual occurrence of the object-relation in the judgment. So there is a strong similarity between the relational character of the ' form of a proposition ' and Russell's order+object-relation; and they have very similar roles in explaining judgment. The form of a proposition, like Russell's order, not only turns a set of elements into a proposition, but somehow corresponds with the way things are related.

These are most of the criticisms which Wittgenstein makes in the 1913 notes on Russell's theory of judgment as we have studied it; he has other things to say, but mainly on the logico-mathematical Russell. Some of his points are fair, but not all of them. The first and the third criticisms given above almost suggest that Wittgenstein was talking about Russell's theory in The Principles of Mathematics; the first criticism would apply there, and the third might well; the second, of



course, certainly would.

The topic of form is one dealt with quite confidently in these notes. It gradually acquires a more problematic air which it carries right into the Tractatus. Its importance comes from Wittgenstein's acute concern about the 'identity' which runs between the proposition and what it says, the identity which Russell's theory sought, unsuccessfully, to explain. It is this problem of identity which absorbs Wittgenstein in the early part of the Notebooks, as the following extended series of quotations will show:-

' The obscurity obviously resides in the question: what does the logical identity of sign and thing signified really consist in? And this question is ( once more ) a main aspect of the whole philosophical problem.'

Notebooks, p.3e.

' The logical identity between sign and thing signified consists in its not being permissible to recognize more or less in the sign than in what it signifies.

If the sign and thing signified were not identical in respect of their total logical content then there would have to be something still more fundamental than logic.'

Loc.cit., & p.4e.

' That a sentence is a logical portrayal of its meaning is obvious to the uncaptive eye.'

Op.cit., p.5e.

' The question how a correlation of relations is possible is identical with the problem of truth.

For the latter is identical with the question how the correlation of situations is possible ( one that signifies and one that is signified ).

It is only possible by means of the correlation of the components; the correlation between names and things named gives an example. ( And it is clear that a correlation of relations too takes place somehow.)

A proposition can express its sense only by being the logical portrayal of it.'

Op.cit., p.6e.

' The general concept of the proposition carries with it a quite general concept of the coordination of proposition and situation: The solution to all my questions must be extremely simple.

In the proposition a world is as it were put together experimentally. ( As when in the law-court in Paris a motor-car accident is represented by means of dolls, etc.)

This must yield the nature of truth straight away ( if I were not blind ).

Let us think of hieroglyphic writing in which each word is a representation of what it stands for. Let us think also of the fact that actual pictures of situations can be right and wrong.



": If the right-hand figure in this

picture represents the man A, and the left-hand one stands for the man B, then the whole might assert, e.g.: " A is fencing with B ". The proposition in picture-writing can be true and false. It has a sense independent of its truth or falsehood. It must be possible to demonstrate everything essential by considering this case.

It can be said that, while we are not certain of being able to turn all situations into pictures on paper, still we are certain that we can portray all logical properties of situations in a two-dimensional script.

It can be said that in our picture the right-hand figure is a representation of something and also the left-hand one, but even if this were not the case, their relative position could be a representation of something. ( Namely a relation.)'

Op.cit., p.7e.

' A picture can present relations that do not exist! How is that possible?

Now once more it looks as if all relations must be logical in order for their existence to be guaranteed by that of the sign.

What connects a and c in " aRb.bSc " is not the sign "." but the occurrence of the same letter " b " in the two simple sentences.

We can say straight away: Instead of: this proposition has such and such a sense: this proposition represents such and such a situation.

It portrays it logically.

Only in this way can the proposition be true or false: It can only agree or disagree with reality by being a picture of a situation.'

Op.cit., p.8e.

' The general concept of two complexes of which the one can be the logical picture of the other, and so in one sense is so.

If there were such a thing as an immediate correlation of relations, the question would be: How are the things that stand in these relations correlated with one another in this case? Is there such a thing as a direct correlation of relations without consideration of their direction? Are we misled into assuming "relations between relations" merely through the apparent analogy between the expressions:

" relations between things "  
and " relations between relations " ?'

Op.cit., pps.9e&10e.

These writings come after the notes examined above, from September to October of 1914. Wittgenstein is obviously searching for the correspondence which Russell claimed to exist between true judgments and the facts which verify them. One big difference between them, however, is Wittgenstein's clear conception of the proposition as something which may appear on a piece of paper. He leaves out all reference to the mind. But simultaneously, he develops a strongly Russellian idea of a spatial or quasi-spatial subject-matter to which the propositional complex corresponds; one recalls his censoring Russell's modelling all relationships on spatial ones. One further similarity, but with a difference, is his seeing as problematic the relation between the relation in the propositional complex and its counterpart in what it 'portrays'; here, the difference is that the relation in the proposition, though a purely spatial one, portrays two men fencing, which is not purely spatial; this is a very big difference from Russell.

Let us call the relation in the proposition, the 'propositional' relation, and the relation in the fact, the 'object' relation, following Russell. Wittgenstein assumes that the propositional and object relations may not be the same; he further assumes that there may be no object relation, in the sense that no two things are actually bound by it. We can portray two men fencing, even if (1) the fencing does not occur on the paper itself and (2) no two men are actually fencing. This prompts him to introduce the expression 'logical picture'.



The fact that a picture is 'logical' somehow allows it to get over these two difficulties.

'...we can portray all logical properties of situations in a two-dimensional script.'

'A picture can present relations that do not exist. How is that possible?

Now once more it looks as if all relations must be logical in order for their existence to be guaranteed by that of the sign.'

It looks as though the contrast with 'logical' is 'actual' or 'material' or both: a picture can present what is not actual, so what it presents is logical: a picture can present in two dimensions what cannot exist in two dimensions, so that, even if there is some material difference between the relations, there is no logical difference. The logical would therefore appear to be timeless, i.e. unaffected by existence, and abstract, i.e. capable of transgressing material differences. The correspondence between the picture-proposition and reality is effected, then, by some relational characteristic of the picture which, in being timeless and abstract, is in some way 'logical'.

A little later, Wittgenstein writes that,

'The theory of logical portrayal by means of language says - quite generally: In order for it to be possible that a proposition should be true or false - agree with reality or not - for this to be possible something in the proposition must be identical with reality.'

' The proposition must enable us to see the logical structure of the situation that makes it true or false. ( As a picture must shew the spatial relation in which the things represented in it must stand if the picture is correct ( true ).)

The form of a picture might be called that in which the picture **MUST** agree with reality ( in order to be capable of portraying it at all ).'

Loc.cit.

As an ordinary picture shows us the spatial relationships of things, so will a picture-proposition show us the logical relationships of things. For this to happen, there must be in the proposition something which is identical with reality, something which is presupposed by this thing's being a picture; Wittgenstein calls this ' form '. He is not clear about what it is, because he asks,

' This is the difficulty: How can there be such a thing as the form of p if there is no situation of this form? And in that case, what does this form really consist in?'

Op.cit., p.21e.

' But when I say: the connexion of the propositional components must be possible for the represented things - does this not contain the whole problem? How can a non-existent connexion between objects be possible?'

Op.cit., p.26e.

He assumes that there is some identity between the picture-proposition and reality; the question is, how

can there be an identity, if nothing in fact corresponds with the picture? Your paper is blank; you fill it with a picture. But you do not thereby fill real space outside your picture; there are false pictures and mere pictures. For a picture to make sense, let alone to be true, there must be some correlation between its space and some other space; how is this possible, if the other space being empty means that there is no 'other space'? He immediately begins to give an answer.

By Russell.

' Then in order for a proposition to present a situation it is only necessary for its component parts to represent those of the situation and for the former to stand in a connexion which is possible for the latter.'

Op.cit., p.27e.

So long as you know what things may go into a space outside your picture and may make up a ' situation ' there, that is enough; let the things in your picture represent those outside, and put the things in the picture into some relationship. In this way, the elements of the proposition-picture will act on behalf of the objects of discourse.

' The possibility of the proposition is, of course, founded on the principle of signs as GOING PROXY for objects.'

Op.cit., p.37e.

Wittgenstein does not go much further in the Notebooks in determining the exact nature of the pictorial relation.

There are remarks here and there, of course, and implications which follow from his discussion of complexity, the need for simplicity, the use of a grid-system of coordinates which can be used in description and so on. The Notebooks will have helped us enough if they have shown how, after his criticisms of Russell's theory of judgment, he himself became more interested not only in the problem of identity between fact and proposition, or reality and the proposition, but in the sort of relational treatment adopted by Russell.

Wittgenstein's Picture Theory amounts, so far, to this:-

A picture-proposition is a complex whose elements go proxy for objects. The propositional elements are connected, and the proposition has sense because it presents a possible connexion of objects in logical space. The truth of the proposition depends on what is actually the case. The element common to both the picture-proposition and what it represents is an abstract relational property, called 'form' which complexes of different types can share.

Now compare it with Russell's theory of judgment:-

A judgment is a complex whose elements are the objects of discourse. The judgment-elements are connected, and it is a judgment because of the possibility of corresponding with a fact whose elements are the objects of discourse. The truth of the judgment depends on what is



actually the case. The element common to both the judgment and its corresponding fact, other than the objects of discourse, is an abstract relational property called 'order' which complexes of different types can share.

Is there not a high degree of correspondence? Does Wittgenstein's device of making the propositional elements 'go proxy' for the objects of discourse not solve Russell's problem, the problem of having different complexes from the same elements? Instead of making the elements identical, Wittgenstein does the next best thing; he makes one set stand in for the other. If Russell had made the elements of the judgment things which stood for the objects of discourse, the only important difference between his theory and Wittgenstein's would have been his inclusion of mind in judgment and Wittgenstein's exclusion of it.

Although the Picture Theory has by now been formed in its essentials, it still has some way to go in the Tractatus, where other differences from Russell emerge. It remains to discuss its more advanced statement there; but the connection between Russell and the Picture Theory has already been established, I hope, and that constitutes the main historical part of this thesis.

### Summary.

1. The close relation between Wittgenstein and Russell

in the theory of the proposition is shown both in the notes of 1913 and the Notebooks 1914-16. In the former, Wittgenstein has a good deal of criticism of Russell, e.g. on Russell's 'correspondence', his extravagant relational analysis of almost everything, his inclusion of assertion in the proposition, his not contrasting names sufficiently with that which symbolises relationally in the proposition, etc. The 'sense' of 'xRy' in the notes reminds us of the 'sense' of Russell's relations.

2. The Notebooks show Wittgenstein trying to work out in detail the relation between the proposition and reality. He adopts a very similar theory to Russell's, i.e. a correspondence theory which operates at the level of propositions about definite objects. Like Russell, he suggests that on the one hand there is a propositional complex, and, on the other, a factual complex, if, that is, the proposition is true. Instead of making the elements of these complexes identical, he makes one set go proxy for the other; the one identical aspect of both fact and picture-proposition is an abstract relational characteristic, like Russell's 'order', which Wittgenstein calls 'form'. Both Russell and Wittgenstein explain the meaningfulness of the propositional complex by the possibility of correspondence, and truth by actual correspondence.

3. Wittgenstein's Picture Theory, although not yet fully developed, by reasserting the identity of the

proposition, has completed Russell's righting of the balance upset by Moore, who made propositions indistinguishable from facts or pseudo-facts. In particular, Russell's problem of having two different complexes constituted from the same elements, is solved, by making the elements only the same in kind, rather than numerically identical.

...break down into simple concepts, if they are not already simple. They are incapable of change; they neither exist nor do they not-exist; they inhabit a realm of their own. It is these which are our objects of thought, those which we mean.

In the *Tractatus* we find something similar: the objects, i.e. the ultimate不可分解的 simples which neither exist nor do not exist and from which all complexes are made.

One of the differences between Moore's concepts and Wittgenstein's objects is that whereas the concepts can go together to make complexes which are not real facts but pseudo-facts, the objects cannot. Another difference

is that whereas anything is a concept, except possibly the relations between concepts, not everything is an object, but only those things which are not complexes, and which properties or relations (See Godel's

excellent article 'Objects, Properties, and Relations' in the *Tractatus*, *Mind*, 1958.). This difference is that

the objects are not only from Moore's concepts but also from those which Russell began by calling "atoms" and "molecules" and later "particulars" and "universals".

### Chapter Five.

Moore had said that the ultimate constituents of reality have nothing to do with the mind, although the mind can be related to them, and presumably, indeed, is itself constituted out of them. These things, the concepts, break down into simple concepts, if they are not already simple. They are incapable of change; they neither exist nor do they not exist; they inhabit a realm of their own. It is these which are our objects of thought, these which we mean.

In the Tractatus we find something similar, the objects, i.e. the ultimate immutable simples which neither exist nor do not exist and from which all complexes are made. One of the differences between Moore's concepts and Wittgenstein's objects is that whereas the concepts can go together to make complexes which are not real facts but pseudo-facts, the objects cannot. Another difference is that whereas anything is a concept, except possibly the relations between concepts, not everything is an object, but only those things which are not complexes, and neither properties nor relations ( See Copi's excellent article ' Objects, Properties, and Relations in the Tractatus ', Mind, 1958.). This differentiates the objects not only from Moore's concepts but also from what Russell began by calling ' things ' and ' concepts ', and later ' particulars ' and ' universals '.



' 2027: Objects, the unalterable, and the subsistent are one and the same.

20271: Objects are what is unalterable and subsistent; their configuration is what is changing and unstable.

20272: The configuration of objects produces states of affairs.'

( All quotations beginning with a number are from the Tractatus; no references will, therefore, be given.)

We are told that change is identical with change in the configuration of objects, and that the configuration of objects is in some sense responsible for ' states of affairs '. In that case, as configuration varies, so will states of affairs. So that any given state of affairs may just disappear. When that happens, the set of objects which went together to make that state of affairs is no longer connected in a certain way.

' 203: In a state of affairs objects fit into one another like the links of a chain.

2031: In a state of affairs objects stand in a determinate relation to one another.

2062: From the existence or non-existence of one state of affairs it is impossible to infer the existence or non-existence of another.'

When a state of affairs disappears, we cannot presume that its elements actually occur elsewhere in some other state of affairs. Indeed, one possibility is that there are no states of affairs whatever ( 427 ). There would then be no world; the world is the totality

of existing states of affairs ( 204 ).

The possibilities of occurring in states of affairs are presupposed by any given object; they are, as it were, written into the object. These possibilities form its nature, so that for any given set of objects, the possibilities of their combining are given too.

' 2012: In logic nothing is accidental: if a thing can occur in a state of affairs, the possibility of the state of affairs must be written into the thing itself.

20123: If I know an object I also know all its possible occurrences in states of affairs.

(Every one of these possibilities must be part of the nature of the object.)

A new possibility cannot be discovered later.

20124: If all objects, are given, then at the same time all possible states of affairs are also given.

An object may therefore be a complex thing, in the sense that it contains the possibility of occurring in many different states of affairs: what is important is that though it be complex in nature, it is not a complex; a complex has different parts, but a complex thing need merely have different aspects.

These possibilities would seem to be the internal properties of the object, which never change. It may have external properties too, and these can change; any

description of an object is given by its external properties, its internal ones being indescribable.

' 201231: If I am to know an object, though I need not know its external properties, I must know all its internal properties.'

4023: .....Just as a description of an object describes it by giving its external properties, so a proposition describes reality by its internal properties.'

These internal properties which constitute the essential but indescribable nature of an object are called its ' form ' ( 20141 ). Wittgenstein expresses the ineffability of the object-in-itself by saying that it is ' colourless ' ( 20232 ); it only takes on a ' colour ' when something happens to it, i.e. when it enters into a state of affairs. Even then, however, although its form is expressed, the expression, i.e. its ' colour ', is not itself part of the form. ( There is reason to believe that objects cannot be coloured in any case; see 63751: this evidence is not conclusive; see 20251.) The manifestation of form constitutes the material or external properties of the object; it gets these by combining with other objects.

' 20231: The substance of the world can only determine a form, and not any material properties. For it is only by means of propositions that material properties are represented - only be the configuration of objects that they are produced.'

The material properties of an object therefore correspond

with its internal properties, or with some of them, for, whatever its outer nature, this is already prefigured in some way, by its inner.

The actual combination of one object with others is a state of affairs. No state of affairs includes any other as a part, because, if it did, the existence of one would depend on that of the other, and so, one could infer the existence of this state of affairs from the existence of that.

' 2062: From the existence or non-existence of one state of affairs it is impossible to infer the existence or non-existence of another.'

This means that a state of affairs is , in a sense, atomic; there is no simpler thing of its type. We are told that the world divides into facts ( 12 ); we are told that the totality of existing states of affairs is the world ( 204 ), and it is tempting to think, therefore, that states of affairs are what have been called ' atomic facts '. Of course the division of  $W$  into  $F$ s and the summation of  $S$ s into  $W$  does not imply that  $F$ s are  $S$ s. Nevertheless, it does seem that states of affairs are atomic facts. At the same time we must take into account two aspects of the concept ' state of affairs ' in order to clarify the sense in which a state of affairs is a fact. I do not intend to do this in great detail, in view of the prolific discussion already made on the



topic by Stenius, Anscombe and Black, to mention only some.

The two aspects are as follows:-

1. A state of affairs is something which Wittgenstein contrasts with a Tatsache, 'Tatsache' being translated as 'fact'.

' 2: What is the case - a fact - is the existence of states of affairs.'

Here you have a contrast between a fact and the existence of states of affairs. Similarly,

' 2034: The structure of a fact consists of the structures of states of affairs.

206: The existence and non-existence of states of affairs is reality.

( We also call the existence of states of affairs a positive fact, and their non-existence a negative fact.)'

Furthermore, in a letter to Russell, he explicitly distinguishes a Tatsache from a Sachverhalt.

' " What is the difference between Tatsache and Sachverhalt?" Sachverhalt is, what corresponds to an Elementarsatz if it is true. Tatsache is what corresponds to the logical product of elementary props when this product is true.'

Notebooks 1914-16, p.129.

Russell blurs over this distinction in his introduction

to the Tractatus. (Wittgenstein's Tractatus.)

' Facts which are not compounded of other facts are what Mr Wittgenstein calls Sachverhalte, whereas a fact which may consist of two or more facts is called a Tatsache: thus, for example, ' Socrates is wise ' is a Sachverhalt, as well as a Tatsache, whereas ' Socrates is wise and Plato is his pupil ' is a Tatsache but not a Sachverhalt.'

Tractatus, p.xi.

The contrast here is between the singular fact and the plural states of affairs, which seems to imply that states of affairs are not facts, even atomic ones.

There can surely be no doubt that an existent state of affairs is a sort of fact, even if it is not a Tatsache; for, after all, it is the state of affairs which verifies the elementary proposition. It is therefore quite appropriate to call an existent state of affairs an ' atomic fact '; the commentators mentioned above all agree on this.

2. The second sort of contrast which Wittgenstein makes with the use of the concept ' state of affairs ' is between the actual and the possible, and it is here that these commentators disagree, particularly Black and Stenius. Stenius feels ( see Chaper 3, Wittgenstein's Tractatus.) that a state of affairs is neutral with respect to existence ( op.cit., p.30.); an existent state of affairs, Stenius would agree, obviously is not neutral in this way; in itself it is a mere possibility. Black disagrees ( see Section 2,

A Companion to Wittgenstein's Tractatus.)

' On the view I am advocating, all three words, Sachverhalt, Sachlage, and Tatsache are usually to be taken as standing for simple or complex states of affairs ( not possibilities ).'

Op.cit., p.45.

This disagreement does not prevent them from agreeing that there are atomic facts, even if one describes them as existent states of affairs, and the other merely as states of affairs.

An atomic fact, then, is a set of objects combined in some way, no other combination of objects being included in it. Atomic facts can go together to make what might be ' molecular ' facts. These two types of combination, objects into facts, and facts into more complex facts, produce the states of the world, that in terms of which our propositions are verified.

What is the relation between our propositions and the world? Before answering this, we must have some idea of what a proposition is. Wittgenstein is not very precise in his use of the word ' Satz '. At one point he takes a proposition to be part of science, at another, part of language.

' 4001: The totality of propositions is language.

411: The totality of true propositions is the whole of natural science ( or the whole corpus of the natural sciences ).'

In general what he means by a proposition is something which is true or false and which, at the same time, is linguistic, i.e. is made from expressions. It is therefore somewhere between a sentence and a statement; perhaps the nearest thing to it is the sort of thing which results from someone's ' making a statement ' in writing for, say, the police. This is both made from expressions and has a truth-value. This is what he means in general, although he does not always mean this. He talks about ' a printed proposition ' ( 3143 ) and at one point ( 3341 ) he seems to make the proposition the thing common to all statement-making sentences with the same meaning. Although he is at great pains to explain the exact relation between our propositions and reality, he does tend very much to fuse the statement made on some particular occasion by the use of a sentence with the meaning of the sentence, to fuse what is meant by someone with what the sentence means.

This thing, the proposition, has both meaning and a truth-value. The meaning of a proposition is what Wittgenstein calls its ' sense '. This is given by its truth conditions and has nothing to do with what may or may not be the case; the sense of a proposition does not change with its truth-value.



' 4024: To understand a proposition means to know what is the case if it is true.

( One can understand it, therefore, without knowing whether it is true.)

4063:.....: in order to be able to say, " ' p ' is true ( or false )', I must have determined in what circumstances I call ' p ' true, and in so doing I determine the sense of the proposition.'

It is the capacity for being true or false which gives the proposition sense; but there is a type of proposition which is senseless, because sense ultimately comes from the way in which the truth of a proposition ( or its falsehood ) is actually correlated with the state of the world.

' 42: The sense of a proposition is its agreement and disagreement with possibilities of existence and non-existence of states of affairs.'

Some propositions are true without regard to the state of the world, and some false; they are without sense, but not without truth-value, because they contain other propositions whose senses cancel one another out; these are the contradictions and tautologies. These are fringe propositions, not proper ones, since they do not have the capacity to be true or false.

Real propositions derive their sense from being images or pictures of reality.

' 406: A proposition can be true or false only in virtue of being a picture of reality.

401: A proposition is a picture of reality. A proposition is a model of reality as we imagine it.'

These propositions which are ' pictures ' show us how reality might be. It is impossible for senseless propositions to do this e.g. tautologies and contradictions; they are not pictures.

' 4462: Tautologies and contradictions are not pictures of reality. They do not represent any possible situations. For the former admit all possible situations, and the latter none.'

A proposition is a picture because it represents.

' 40312: My fundamental idea is that the " logical constants " are not representatives; that there can be no representatives of the logic of facts.'

Logical constants are not representatives because they do not name or stand for objects, and if this is their status the inference might be drawn that propositions containing them cannot picture as propositions without them can. Wittgenstein does not draw the inference; he often just talks about ' the proposition ', and in denying that logical truths and falsehoods are pictures he conspicuously implies that all other propositions are. Moreover he says in 547

' In fact elementary propositions themselves contain all logical operations. For ' fa ' says the same thing as '  $(\exists x).fx.x=a$  '.

Wherever there is compositeness, argument and function are present, and where these are present, we already have all the logical constants.'

Despite this, it would seem that there is a case for saying<sup>161.</sup> that there are two forms of 'representation' for propositions, a strong and a weak. All propositions with sense are pictures of a kind; but the important kind of picturing is restricted to propositions which do not contain logical constants, i.e. the sort which Russell, in Principia Mathematica calls 'elementary' (op.cit., p.44.). A proposition may contain logical constants and still have a representational capacity, because its truth is correlated with some possible state, or states, of the world. It can 'show' the state of reality, not through the relation of similarity, which is how the strong form of picturing works, but through such conventions as, for example, that ( p.q ) is true only in the event that p is true and q is true; it is simply a convention that the dot means what it does, not something dependent on the similarity of the dot to some feature of reality.

So the genuine picture-propositions do not contain elements like the dot and vel signs. What are their elements? The way the answer is given depends on the point of view of the questioner, because Wittgenstein distinguishes between the linguistic and the metaphysical aspect of the picture. Both parts of the answer must be given, and so the choice is simply about which to give first.

To begin with, Wittgenstein distinguishes between the proposition and the propositional sign.

' 312: I call the sign with which we express a thought a propositional sign.- And a proposition is a propositional sign in its projective relation to the world.

311: We use the perceptible sign of a proposition ( spoken or written, etc.) as a projection of a possible situation.

31431: The essence of a propositional sign is very clearly seen if we imagine one composed of spatial objects ( such as tables, chairs, and books ) instead of written signs.

Then the spatial arrangement of these things will express the sense of the proposition.

32: In a proposition a thought can be expressed in such a way that elements of the propositional sign correspond to the objects of the thought.

3201: I call such elements ' simple signs ', and such a proposition ' completely analysed '.

3202: The simple signs employed in propositions are called names.

3203: A name means an object. The object is its meaning.

314: What constitutes a propositional sign is that in it its elements ( the words ) stand in a determinate relation to one another.

A propositional sign is a fact.'

The proposition is to be distinguished from its sign, which is something observable, something which can exist in a non-linguistic sense. The sign is a fact. It is a set of things put together in some definite way. It is not, at the moment, clear whether the analysis of the sign into elements must yield just those elements which are propositionally significant; i.e. does the analysis



of the proposition into the smallest units of meaning give the same set as the analysis of the fact? He mentions the arrangement of tables, chairs and books as a parallel to the sort of arrangement within the propositional sign. A book, however, has itself many parts, and it therefore looks as if there is no sort of guarantee that a non-linguistic analysis of the sign qua fact will produce just those things which are the meaning-elements of the proposition.

From the linguistic point of view, the elements are 'names' whose meanings are objects. Strictly speaking, since we are still at the level of sign, the meaning element is not a name but a sign used as a name. The real name of some object is what all the signs for it have in common (33411). It is still not clear what the elements of the propositional sign qua fact are, even if qua sign its elements are names. Nor is it clear why Wittgenstein should say that the meaning-elements are names.

The answer to this last question comes partly from Russell. He had made those of his words which were not purely logical either proper names or general names. His reason was that the only way of explaining their function was through their correspondence to actual things, proper names to particulars or universals, general names to universals alone. Wittgenstein is thinking in the same way. The ultimate meaning-elements of picture-propositions must be correlated with actual things, as the names of those things. This leaves undecided the way or ways in

which names are put together. Obviously, if the sole elements of the proposition are names, and of the propositional sign, signs for objects, there has to be some means for avoiding having just a mere set of names or signs, instead of a propositional complex.

To be told that linguistic analysis stops at names does not help us at all in grasping the metaphysical aspect of the propositional simples. What we require to know is how the characteristics of the elements of the sign qua fact are related to the characteristics of the sign qua proposition.

We are told that a name represents an object ( 322 ). This does not simply mean that a name is correlated with an object. 40311 says that the name plays the part of its meaning in a combination representing the ' meaning ' in relation to other things. 31432 states that putting one name in a certain relation to another says that their meanings are so related. The function of the name, then, is not simply to refer to some particular thing, but to act like/thing at least to the extent of filling a like relational role. /

Unfortunately, Wittgenstein does not say a great deal explicitly about the matching of linguistic and metaphysical simplicity. Certain important facts about this matching, which is crucial to the theory, will have to be inferred rather than seen directly in quotations.

We will leave the linguistic side for the moment and simply consider what Wittgenstein says about pictures.

We picture facts to ourselves ( 21 ). That is to say, we put certain things together to make models. The model is a relational system which represents, in a quasi-spatial manner, the way in which certain other things are arranged ( 211, 212, 215 ). To establish this pictorial relationship, aside from putting the elements of the model into some sort of system, all that need be done is to correlate the one set of elements with the other ( 21514 ). These elements are not themselves relations, but the terms of relations. Yet we do not need to mention relations or directly show them in our correlation; all that we need correlate are the objects with the elements of the model. This must mean that somehow, in correlating the two sets of elements we have at the same time correlated relations too.

For a relational system to represent some other system, there must be something identical in both. This common element is called ' form '. It would be no exaggeration to say that the central notion of the Tractatus is this one, and an exceedingly difficult notion it is.

The form which a picture and reality have in common, in virtue of which the picture is a picture, is pictorial form. If a coloured picture shows you a coloured object, at least part of that picture's pictorial form is colour.

If a spatial arrangement is shown by a spatial model or picture, the pictorial form of the latter is space ( 217, 2171 ). Whatever pictorial form a picture has, e.g. spatial, colour, musical, there is another sort of form presupposed, and that is logical form ( 2182 ), so that the form of a spatial picture is not simply space; it is also logic. Some pictures are just logical pictures, for their pictorial form, unlike that of other pictures, is just logic and nothing else. ( 2181 ).

I propose, for the sake of convenience, to call one sort of form ' material ', to distinguish it from the logical. This term is already used by Wittgenstein, e.g. at 20231. Space and colour are material forms, rather than logical ones; but both presuppose logic.

Wittgenstein seems to say that logical form is not only presupposed by all other types, but is capable in some way of supplanting them pictorially.

' 219: Logical pictures can depict the world.'

This seems to mean that one does not need spatial pictures, logical ones being good enough, even if one wants to show the spatial arrangement of reality. This is what I take it to mean, and I identify these logical pictures, which can do anything spatial or coloured pictures can do, with thoughts.



' 3: A logical picture of facts is a thought.'

We shall consider later how, or if, a picture in logic, rather than space ( say ), can give information about spatial, rather than just logical relationships of objects. Let us, for the moment, return to states of affairs.

A state of affairs is a combination of objects. The state of affairs has parts. These are the objects. If a state of affairs is to be represented propositionally, the proposition must have the same number of parts as the state of affairs.

' 404: In a proposition there must be exactly as many distinguishable parts as in the situation that it represents.

The two must possess the same logical ( mathematical ) multiplicity. ( Compare Hertz's Mechanics on dynamical models.)'

Not only, of course, does the proposition have the same number of parts as its corresponding atomic fact ( if there is one ); it must have the same form too. But this form need not be materially identical, since Wittgenstein allows a musical score, the idea in the composer's mind and a gramophone record, to have the same logical character.

' 4014: A gramophone record, the musical idea, the written notes, and the sound-waves, all stand to one another in the same internal

relation of depicting that holds between language and the world.

They are all constructed according to a common logical plan.'

All that is required is identity of logical form. These two requirements seem to imply that the only thing capable of picturing an atomic fact is some other atomic fact. For surely the logical character of a propositional element forbids its being anything other than an object. If a propositional element could, for instance, break up, its logical role would be decidedly different from that of an object. Strictly speaking, it follows simply from identity of form that only an atomic fact can picture an atomic fact, since number is a feature of form in any case.

Again, we are told that the meaning of a sign is irrelevant to its formal character which can be determined purely syntactically.

' 3327: A sign does not determine a logical form unless it is taken together with its logico-syntactical employment.

333: In logical syntax the meaning of a sign should never play a role. It must be possible to establish logical syntax without mentioning the meaning of a sign: only the description of expressions may be presupposed.'

This surely means that the logical form of an expression can be settled purely by examining the expression and its

relation to other expressions. The logical form of those expressions will appear as the syntax of language. Assuming that the syntax of language is that of its subject matter, although we need not know what that subject matter is, we can then say that to a linguistic complex there cannot correspond some simple, i.e. if the language is to picture atomic facts, it must be of the atomic form. Not knowing the subject matter of discourse, we cannot say that this element, whose logical form is that of a complex, has the syntactic role of a simple; its syntactic role must be other than that of a simple if its logical form is that of a complex. The syntactic form is simply the logical form given a linguistic significance.

The relation between the elements of the propositional sign qua fact and its elements qua linguistic units is simply this, that anything which is an element of either is both an object and a name. The proposition-picture, in the shape of a propositional sign, is made up linguistically of names, and factually of objects, the same set of elements being given by each type of analysis.

This means that ultimately there is only one sort of simplicity and one sort of analysis for language, the sort which brings you to that point at which there is an exact correspondence between language and fact which is self-evident. At this most fundamental level, everything is explicit.

We have not, in fact, considered any claim to the effect that some analysis of language would produce a set of atomic facts as the most fundamental type of proposition. All that has been done is to consider one aspect of the sort of proposition required to picture a state of affairs.

Wittgenstein calls this sort of proposition an ' elementary ' proposition.

' 421: The simplest kind of proposition, an elementary proposition, asserts the existence of a state of affairs.

422: An elementary proposition consists of names. It is a nexus, a concatenation, of names.'

As a sentence, the proposition is a combination of names, as a fact it is a combination of objects and as a picture it is a combination of elements each of which plays the part of the thing which it represents. The form of the proposition is the syntactic form of the sentence, the logical form of the fact and the pictorial form of the picture. It is this form which we ~~would~~ find in the fact, if there were a fact, making the proposition true. /sh?

It is not the form, however, which actually binds the propositional elements together. Form is mere possibility. Form merely permits elements to act as they do, or forbids them from acting in certain ways. It does not occur in the world at all, whereas there must be something besides the objects to explain their combination. This other sort



of thing is the relation. A relation is not represented in the same way as an object; it is not named. What corresponds in the proposition-picture to a relation is a thing of the same logical type, i.e. a relation, just as what corresponds to an object is an object. Why are relations not named? Precisely because objects are not relations; in the first place, what binds a set of objects into a complex cannot be another object, and so cannot correspond to the syntactic category of a name; and, in the second place, what corresponds to a name is timeless and subsistent, unlike relations, which disappear with the break-up of complexes.

Wittgenstein does not explicitly give either of these reasons, because he is not explicit in his discussion of relations. The first of these reasons seems to be given at 31432.

' 31432: Instead of, " The complex sign ' aRb ' says that a stands to b in the relation R ", we ought to put, " That ' a ' stands to ' b ' in a certain relation says that aRb" . '

The second reason, I would suggest, follows from his making objects terms of relations, his idea being that the only ultimate persistence is of objects.

At any rate, relations are not essentially substantive, according to Wittgenstein, and he marks this distinction by not considering the relation as an element either of the fact or of the proposition. Nevertheless, given a

state of affairs, one is given a relation, the one in which the objects occur. Form is the possibility of things being related.

' 203: In a state of affairs objects fit into one another like the links of a chain.

2031: In a state of affairs objects stand in a determinate relation to one another.

2032: The determinate way in which objects are connected in a state of affairs is the structure of the state of affairs.

2033: Its form is the possibility of its structure.'

We are told that some ' determinate relation ' occurs in the state of affairs; are we told that this is its ' structure '? This is a very difficult question, which is expressed better, perhaps, in another form:- Is the structure of a state of affairs the relation itself, or the objects actually being related in that way? We may add to the difficulty by simultaneously considering 215 and 2151.

' 215: The fact that the elements of a picture are related to one another in a determinate way represents that things are related to one another in the same way.

Let us call this connexion of its elements the structure of the picture, and let us call the possibility of this structure the pictorial form of the picture.

2151: Pictorial form is the possibility that things are related to one another in the same way as the elements of the picture.'

Here we are told that the connexion of elements constitutes the structure of the picture, and that what is represented is a similar connexion of things. The things represented may be related to one another just as the pictorial elements are. It looks as though the structure of the one could be the structure of the other. It looks as though structure is just some relation, like that of loving, say, or being to the left of.

I think that McGuinness is right in claiming that structure is not shared, and is not just some relation ( ' Pictures and form in Wittgenstein's Tractatus ', Archivio di Filosofia, 1956.). This means that ' to assert the existence of the structure is nothing other than to assert the fact, and it will also seem that to say that a fact has a certain structure is to say nothing beyond what one has already said in asserting the fact ' ( op.cit., p214.).

There are two sorts of evidence for this interpretation. The first, and weakest, is that Wittgenstein explicitly says that what is identical in the picture and in reality is form ( 217, 218.) which he distinguishes from structure, as we saw above. If he intended structure to be shared, why did he explicitly say that what the two have in common is form?

The other sort of evidence, to which McGuinness appeals, following a suggestion made by Ramsey, concerns the log-

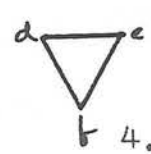
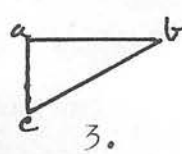
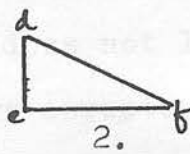
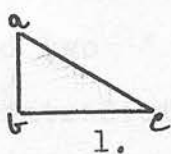
ical relations between propositions being shown by their structure.

' 513: When the truth of one proposition follows from the truth of others, we can see this from the structure of the propositions.

41211: Thus one proposition ' fa ' shows that the object a occurs in its sense, two propositions ' fa ' and ' ga ' show that the same object is mentioned in both of them.

If two propositions contradict one another, then their structure shows it; the same is true if one of them follows from the other. And so on.'

41211 certainly seems to link structure explicitly with particular names, even if 513 does not. However Griffin, mentioned above, rejects this as evidence for tying structure to the identity of the things structured. His argument ( Wittgenstein's Logical Atomism, pps.73-4.) is that the logical relations between propositions can quite adequately be represented by propositional variables, e.g. ' xRy ' and ' - xRy '. Once the variables are given values the result is a pair of contradictory propositions. No names need be used. Structure, therefore, can be identified with a certain type of propositional form. Griffin then goes on to a parallel account of the structure of states of affairs. States of affairs may share their structure, on his account, which he illustrates with the following diagrams:-





Given six spatial objects, a to f, these can be arranged in different ways. Only the first and second of these diagrams shows some two arrangements of these objects with the same structure. All of them have the same form however. Griffin goes on to explain that only form must be common to picture and pictured, structure being variable, i.e. sometimes in agreement, sometimes not.

To return to his argument with McGuinness now. Griffin would presumably say that the fact that John loves Jean has the same structure as the fact that Bill loves Joan, since, in each case, one member of each pair is related in the same way to the other member. He would seem to be committed to acknowledging that the two propositions, ' John loves Jean ' and ' Bill loves Joan ', have the same structure. Similarly, he would say that ' John does not love Jean ' and ' Bill does not love Joan ' have the same structure. Now there is nothing in the proposition ' Bill does not love Joan ' which contradicts ' John loves Jean ', but this last proposition is contradicted by ' John does not love Jean '; so if we can tell contradiction by structure, the structure of ' John does not love Jean ' cannot be the same as that of ' Bill does not love Joan '.

We can put it another way. If the structure of the first two propositions is ' x loves y ' and of the second two ' x does not love y ', assuming that these are contradictory structures, anything filling one

would contradict anything filling the other, and so  
 ' Bill does not love Joan ' would contradict ' John  
 loves Jean '.

Of course, if he wants to say that while not needing  
 the actual names, one must include relative identities,  
 so that the structure of ' John loves Jean ' is ' x  
 loves y ' and of ' Bill loves Joan ' ' s loves t ',  
 he is admitting that they do not have the same structure.

It therefore seems best to hold that structure cannot  
 be shared, though it can possibly be shared in the weak  
 sense that it can be repeated. This view is also stated  
 by Black ( A companion, p.66.) who does not seem to really  
 discuss it anywhere. It is also Maslow's view as given  
 in A Study of Wittgenstein's Tractatus, p.85.

As McGuinness says, the structure of a fact is simply  
 the fact itself. It is the actual way the objects are  
 put together. Is this structure in any sense logical? Is it  
 the logical structure of the fact? My answer to the very  
 puzzling question, What does Wittgenstein mean by  
 ' logical ' when he is talking about the make-up of  
 complexes?, will be given later. I will say then whether  
 or not, in my opinion, structure is logical.

We now assume that a picture-proposition is an atomic  
 fact and that the fact which makes it true cannot have  
 the same structure. What the two do have in common is

pictorial form, which in the case of a thought or proposition, is logical form. Logical form is the possibility that things go together in a certain way. The logical form of an object is the set of ways in which it can combine with other objects. The logical form of a state of affairs is simply the possibility of this sort of combination.

It is obvious that Wittgenstein wishes to account for the ability language has to 'reduce' all relations to its own level. It is one thing to explain people being knocked over by motor-cars, using models which are recognisably like people and motor-cars, and seemingly quite another to do so just by language. Wittgenstein thinks that this seeming difference is in fact not a real one, and to explain his point, he introduces the concept of 'logical form'. Language does not give us pictures in the ordinary sense; that is why it seems as though the use of a model is quite unlike the use of a sentence. But language does, according to his theory, contain pictures all the same; these are 'logical' pictures. This whole theory, therefore, depends on what he means by a 'logical' picture, and this, in turn, depends on what he means by logical form.

We can knock one sort of candidate out straight away. You might think that if the structure of the fact that John loves Jean is just that John is related to Jean by his loving her, then the form of that fact would be the

relation of love. This cannot be the logical form, however, even if it is through there being such a thing as love that he loves her. The reason is that nothing on the page loves anything else on the page, yet there is something on the page which says that John loves Jean. Since the logical form is shared by whatever says that John loves Jean, the relation of loving is quite definitely not that logical form.

The same sort of argument can be used to show that logical form has no observable correlate; this does not mean that logical forms cannot be expressed perceptually, but that nothing follows about the observable properties of some thing or complex from its being of this logical form or that. There need be no observable similarities between a language and its subject-matter.

This suggests that logical form is the sort of thing which might correspond to an expression like ' $(R(x,y))$ ' (McGuinness understands it in this way; see p.222.). A form might then, if it be logical, take the shape of the abstract property of being an n-term relationship. John's loving Jean would have the form of being a two-term relationship.

This seems particularly barren in view of Wittgenstein's emphasis on the form of the object which is not represented at all in this conception of form. Black makes the forms of the relevant objects ' uniquely determine the logical



forms of the atomic facts in which they can combine ' ( A Companion, p.68.) and makes the logical form of the fact determine the forms of its constituents ( op.cit., p.128.). This gives a richer content to logical form than mere multiplicity. What this means is that it is not enough simply to get a certain number of objects as the elements of the propositional sign. The elements must have certain formal properties if they are to enter some combination together. Besides being of a certain number, the elements of the complex must have a formal disposition which fits them for their places in the logical form of the fact and these formal properties will be known from the form of the fact.

One naturally wonders whether or not the properties of symmetry/asymmetry, transitivity/intransitivity and reflexivity/irreflexivity are also given with the logical form. According to Black's theory this would be unnecessary, since no set of objects can unite in more than one way, no atomic facts imply any other atomic facts and each atomic fact must have more than one element. I infer that he would say that giving this sort of description of an atomic form is unnecessary from his other opinions. Believing that no set of objects can unite in more than one way at any time commits one to forbidding symmetrical arrangements; believing that atomic facts cannot imply one another commits one to intransitivity; believing that an atomic fact is at least a relation between two things rules out reflexivity.

I am not myself convinced that no set of atomic elements can only combine in one possible way. It seems that one must admit that spatial facts cannot be atomic ones, because one spatial arrangement excludes others and no elementary propositions are inconsistent ( 63751 ). This is disturbing, because spatial arrangements seem to be, par excellence, candidates for the role of atomic facts.

Black's arguments against any set of objects uniting in more than one way are as follows:-

1. 21514 says that the picturing relation consists only of the correlation of the elements of the picture with objects. If objects could combine in more than one way, ' the sense of an elementary proposition would not always be a unique function of the references of its component names ' ( op. cit., p.82.) Also 3318 says that a proposition is a function of its expressions, and 34 implies that sense is a unique function of the references of the names.

The question is whether one set of objects can be arranged in different ways, which are not exclusive, in one space. This seems totally inconsistent with the space-image, since no two positions can be simultaneously occupied by one thing. Therefore, if the same set of objects can be arranged differently, the various arrangements must occur in different types of space. But then there would need to be a different propositional sign for each type of space, otherwise we should not know which arrangement was being

asserted. We therefore have different atomic facts, with the same elements, and different propositional signs. How are we to know that the same set of objects is being spoken about?

If we give up the inconsistency clause which forces us to allow different simultaneous arrangements, things are somewhat easier. To this first argument of Black's we can say that when Wittgenstein says that all that is necessary to establish a picture relation is the correlation of one set of elements with another, he does not mean that the arrangement of elements plays no part; he means that there is no need to settle the correlation of relations, since whatever the relation operating in one, it also operates in the other. You can choose which objects to talk about, but you cannot choose to indicate one relation by another.

As to the other sort of argument, that sense is a unique function of the meanings of the constituent expressions of the proposition, may we not say that even if the sense of 'p or q' is a function of that of 'p' and 'q', this does not prevent there being various combinations of 'p' and 'q'.

2. Black says that if there were two distinct propositions composed of the same names, there would be a logical operation converting one into the other (op. cit., p.83.). Since Wittgenstein only admits truth-

functional operations, this, not being a truth-functional one, would not be a possible operation.

I myself can see no reason for accepting the initial premise, that if two propositions have the same names, one can be turned into the other by a logical operation. The 'conversion', if one wants to call it that, is not a logical manoeuvre; it may simply be a spatial one. The names are rearranged. Black appeals to 554 which says that, in general, a proposition occurs in another only as the base of a truth-operation. Since there is no question of one proposition occurring in another, there is no point in invoking 554.

3. His last argument is that we should be able to represent either of the two ( say ) arrangements of the one set of objects with the same proposition, and so the proposition would not be automatically linked with the fact it pictures via identity of form.

However, it does not follow that one proposition can give us all the arrangements of some set of objects just because it can give us one such arrangement. The rearrangement of objects would require a rearrangement of propositional elements too.

The one thing which stands in the way of this sort of interpretation is that if objects can be rearranged in exclusive ways, in space, for instance, the logical in-



dependence of elementary propositions is infringed. There is good reason for allowing this infringement, although this would conflict with an important assumption of the Tractatus, and that is to make sense of the image or model of logical space. Another reason is that on Black's view, although an elementary proposition is not just a set of names, it might as well be, since, so long as the names, with those meanings, can go together, there is no point in using their actual combination. On Black's account relational characteristics are still vital, but they do not need to figure in the actual proposition.

I therefore prefer to assume that objects and propositional elements can go together in different ways, although I cannot see how this is not to conflict with the stipulation that elementary propositions be quite independent logically. ( See Stenius's consideration of this, with which I agree, in Chapter 4 of his book, particularly pps.46-7.)

Whether one is to include such factors as asymmetry/symmetry in the characterising of logical form is dependent on one's view of the logical relations of elementary propositions. If one is going to allow logical relations, then one can allow transitivity and symmetry, but not reflexivity, into form. The discussion now becomes one about the interpretation of the Tractatus as an actual theory of language

or at least as a system which is best understood in this way or that even if it means sacrificing a fairly important assumption.

The sort of account of form offered by Black is in some ways parallel to that given by Stenius in his reconstruction of the Picture Theory in terms of people, their qualities and relations. The similarity I am thinking of is that both restrict form to a combination of number the forms of the elements in the complexes.

Stenius is perfectly well aware that his model is not in keeping with the Tractatus; he offers it, nevertheless, to give some sense to the notion of picturing. Imagine two sets of elements A and B, as follows:-

Set <u>A</u>	<u>Category</u>	Set <u>B</u>
Alan	Object	Adams
Brian	"	Barrat
Christopher	"	Colman
David	"	Denison
Eric	"	Ellis
Intelligence	Quality	Braveness
Father-son relation	Binary relation	Order-giving relation

These two systems have the same categorial structure ( Wittgenstein's Tractatus, p.92.) because each consists of five objects, one quality and one binary relation. These elements can now be combined to make facts. Assuming the correspondence indicated in the table above, a fact in one

field, each system having its own field or context, can picture a fact in the other. E.g. the fact that Eric is intelligent can picture the fact that Ellis is brave; the fact that Brian is Alan's father can picture the fact that Barrat gives orders to Adams. The forms of the facts are presumably ( Object+Quality ) and ( Two objects+Binary relation ).

I do not think that the categorial analysis given by Stenius is quite enough to give us the logical form of an atomic fact, because the objects have formal properties which should somehow be represented or included in the form of the fact, as Black points out.

What a logical form must do qua form of a complex, is, first to tell us how many objects there are in the fact, second, their general formal relation and third, something about the logical character of each object in relation to other things of the same type. It is this third type of information which the Stenius model does not give us.

I wish to return to a contrast made earlier, in the light of which logical form made its first appearance, the contrast between pictures which rely on observable similarities and those which Wittgenstein claims exist at the basis of language and which do not depend on observable similarities, i.e. the logical pictures.

What a logical picture gives us is not unobservable; it

might be a piece of music. If the logical picture is true, it has given information about some actual complex. It has said, correctly, that there is such a complex. It is in virtue of its logical character that the picture does this, together with reliance on the correlation of elements. But the point is this, that these complexes have an observable as well as a logical character. They have an observable side as well as an abstract one.

What this means, I suggest, is that, aside from their logical form, which they can share with quite different types of complex, they also have a material form. The material form of something may be used in picturing, but if it is the medium of similarity, the picture is not, in the full sense, a logical picture. E.g. if we represent spatial relationships spatially, the general form of representation is space; this is the picture's general material form: but the picture will have a particular spatial relation at work in it, e.g. being above, or being to the right of etc.; this particular relation will be the particular material form.

Wittgenstein's remarks about space, time and colour being forms of objects ( 20251, 2171 ) are often said to be puzzling because it is not seen how these fit in with logical form. I think that the explanation of this is Wittgenstein's not fully distinguishing material from logical form. Space, time and colour are material forms,



not logical ones; logic permeates space, time and colour.

When Wittgenstein talks about ' the ' relation in a state of affairs ( 2031 ) and the ' determinate way '( 215 ) in which the elements in the picture are related, and then says that the two complexes are bound ' in the same way ' ( 2151 ), one naturally has in mind only one relation, which one takes to be the binding force in each complex. One is then told by the theory that spatial relationships can picture non-spatial ones ( e.g. as with a musical score ). This must be confusing, because it contradicts the assumption based/ the middle 2's. One is forced, therefore, to think of this ' relation ' which acts in both complexes as distinct from ordinary, or what I call ' material ' relations. L

The solution to the puzzle is to see that there are in the Tractatus two types of form. Each complex has a material and a logical form, the former not being deducible from the latter. There persists a further ambiguity, and that lies in Wittgenstein's talking about ' the logical form ' of a complex, meaning some particular thing, and then talking about colour and space as forms. This ambiguity is resolved by meaning the particular form of an object or complex when one talks about ' the form ' and the general form, i.e. space or time or logic, when one talks about ' the general form '. The general form of a picture which is a thought is logic; the general form of a photograph is space and colour; the general form of a linguistic element is logic; the general form of a photographic

element is space and colour, or, perhaps, simply colour.

Something like the relation of loving would be a particular form, on the other hand. If John loves Jean, the particular material form of that fact is the relation of loving. Its logical form would be something like two things being related by a relation  $R$  such that each can be related by  $R$  to the other.

I suggest this analysis of the fact that John loves Jean.

Fact.....John loves Jean

Logical form..... $xRy$  is possible  
and  $yRx$  is possible

Logical structure.....John  $R$  Jean

Material form..... $x$  loves  $y$

Material  
structure.....John loves Jean

This analysis, cannot, unfortunately, be applied with equal success to the objects, i.e. John and Jean. We want somehow to explain their form at these two levels. John's logical form seems, however, to be just his material form, unless it be simply his capacity to enter relationships. Is the most natural candidate for his logical form not simply his capacity for loving? It is this which allows his name to occur in the expression ' ( ) loves Jean ', and this which prevents our inserting some such expression as ' this piece of cake '.

What this means is that the forms of the objects cannot be represented in the logical form of the fact, since the form of the one is material and of the other purely formal. The form of loving would be something like:-

$xRy$  is possible  
 $yRx$  is possible  
 $xRy.yRx$  is possible

No mention is made of love or the sort of thing that can be a value of 'x' or 'y'. The case is otherwise with some given object, since its potential can only be given in terms of being human etc.

There is an alternative, to make the form of an object always relative to some other object, so that if one wants to know the form of A, say, it will be with respect to something B, say. A's form might then be one of the following:-

1. A has no form with respect to B;  
they cannot be related in an atomic fact.
2.  $ARB$  is possible;  $BRA$  is possible;  
 $ARB.BRA$  is impossible.

The form of an object would then be accessible in a list giving combinations without mentioning relations. This is perhaps the closest that one can get to logical form so far as objects are concerned; it still presupposes material similarities and differences between objects, and is not purely logical.

Wittgenstein seems to have followed the same sort of course as Russell. Russell distinguished between 'order' and the relation producing it. The same order could come from quite different relations, e.g. the judging relation and the relation of loving. It was order which constituted the formal similarity of complexes. With Wittgenstein it is logical form. We saw how he began in the Notebooks by investigating what sort of identity there could be between reality and our propositions, if, firstly, there are sometimes no relations of the asserted sort, and if, secondly, the relation in the picture is not like that which is asserted actually to exist. We had previously seen him talking about form as a simple relational characteristic. From there it changed into something abstract and formal; but this difference is not clearly marked in the Tractatus, as can be seen from his not discriminating clearly between logical form and space or colour as forms. And at the level of objects this conflict is intolerable, since it is impossible to distinguish between the pure logical form of an object and its matter; as he said, the object is colourless, without material properties; but this does not mean that it still retains its logical ones; these must go too.

If objects are to have forms these must be given by the possibilities of material relationships with other objects. The logical forms of facts are of a more abstract type. Wittgenstein says, as Black has pointed out ( p.82, op.cit.), that all one need do is to correlate names with objects.



Then, by arranging the names into an atomic fact one has a proposition which automatically, through form, says that p, say. Even if we accept that the forms of the objects of discourse are known and that the logical form of the fact is known too, through its occurrence in the picture-proposition, is this enough? After all, we know John and Jean, we know that they are related in a two-term symmetrical relationship; but why should we conclude that they are married? On this point the answer must be that, so far as the objects are concerned, any set of objects which can go together, must occur in a combination which can be expressed simply by names and logical form, and consequently, they can only go together in one sort of way, in one dimension if you like. They cannot occur in both space and time, for instance, unless there are abstract logical differences which would make clear whether the complex was spatial and not temporal or vice versa. For any given set of objects there are not then different material forms unless there are different logical ones; but since the point of logical form is not to distinguish material ones, but to override them, it seems that any set of objects can only have one material form to work with.

I have mentioned Black, McGuinness and Stenius in particular, together with Griffin, because they have given special consideration to the problem of form. I do not entirely agree with any of them; however there is a good deal of disagreement in any case. The question is not so much - What is the correct interpretation? but - What is the best

sense we can make of it?

Two writers not examined are Anscombe and Favrholt. The first says very little about structure, which is not listed in the subject-index of her book. Her illustration of logical space, An Introduction to Wittgenstein's Tractatus, p.75, has nothing to do with the actual arrangement of objects or with what a picture and the pictured have in common.

Favrholt waits until the last chapter of his book, An Interpretation and Critique of Wittgenstein's Tractatus, before he attempts 'any detailed explanation of Wittgenstein's concept "structure" or "logical form"' (op.cit., p.204.), and there he says,

'The idea is briefly this. By means of names (or elements of thoughts) we can make numerous configurations. But only some of these fulfill the condition that the objects which are represented by the names can be combined in a similar way. And only these fulfilling this condition can be said to possess logical form. (This is expressed in 2182: 'Every picture is at the same time a logical one..') Per definition the concept 'structure' is used only in connection with 'logical pictures'.'

Op.cit., p.205.

There is no need to emphasise just how misleading this is, missing, as it does, one of the most important, if not the most important point of the Picture Theory,

that structure and form are pre-linguistic and necessary features of reality.

In criticising one other point in this short passage in Favrholt's book, I will close my discussion of form.

At the atomic level of language the linguistic elements are themselves objects, since this is the only way to achieve that correspondence by which to say something. Without this identity nothing can be said at all. The objects have a dual role, as objects and as names. That something is a name does not simply mean that you have decided this, and so it became a name. It is not a name unless it can go proxy for what it names. This means that the way the name behaves relative to other names is the same as the way the thing named behaves to the other things named. It is this which allows us to understand propositions which we may not know to be true and may not know to be false, and which also allows us to put old expressions together to make new propositions. Accordingly, Favrholt's suggestion that names may go together although the things named cannot, is not true; it is built into the name A that the things it goes with, if names, name objects which go with A.

#### Summary.

1. The objects of the Tractatus are immutable simples

which, like Moore's concepts, neither exist nor do not exist and yet form that from which reality is made. The simples go together to form states of affairs or atomic facts, which make up the world. The dominant image is that of space being filled in this way or that, or not at all.

2. These objects form the ultimate subjects of discourse. We talk about them through pictures. At one level of language, the proposition is a picture, although it does not seem to be one because it is not perceptually like what it is asserting; the proposition is a logical picture. Not all propositions are pictures. Tautologies and contradictions are not in any sense representations of reality. All other propositions are. But those propositions which contain elements not standing for real things, although representations in a weak sense, are not the real picture-propositions. A real picture-proposition is one whose elements can go proxy for objects. A real picture-proposition is one asserting an atomic fact, and it is itself an atomic fact.

3. Wittgenstein carries on the investigation into the supposed identical element present in both the proposition and its corresponding fact, an element already postulated by Russell. Wittgenstein's theory shows in a confused way a distinction already made by Russell. This is the distinction between actual 'material' relations and corresponding abstract relational characteristics which override material ( e.g. spatial ) ones. Russell called



this abstract property, common to both judgment and the fact which makes the judgment true, ' order '; Wittgenstein calls it ' logical form '.

4. Wittgenstein should have distinguished between logical form and material form much more clearly than he actually did. Indeed, it seems that he was not really aware of the distinction, although he did realise that there had to be some very abstract relational property if there was to be the required identity between proposition and fact ( if the proposition were true ). His lack of awareness is not only shown by his talking about ' the ' relation common to both the linguistic and the non-linguistic complexes, when in fact each complex has its own material relation; and by his talking about colour and space as forms of objects, with no distinction made between this sort of form and logical form; it is also shown by his leaving the objects a logical form, even when they are stripped of all material properties.

5. Each atomic complex has a form, in the logical sense. It can share this with another atomic complex, even if one is spatial and the other temporal, i.e. even if the complexes have different material forms. The structure of a complex is just the way the elements are put together in it. A complex would therefore seem to have a logical form, a logical structure, a material form and a material structure. A complex has only one of each.

6. An object has a form. The form of an object is the set of possible relationships it can enter with other objects. Although this can be represented abstractly by a list which does not contain any reference to any actual relation, but only references to objects, it is not of the same abstract type as the form of a fact, and cannot therefore be included in the logical form of a fact. A, literal reading, such as Black gives, contradicts this. In giving a plausible interpretation to the theory, however, it seems best not to give a literal reading.

7. A proposition-picture, if it is true, shares its form, but not its structure, with the atomic fact which makes it true. Any element in the picture behaves with respect to the other elements just as the corresponding element in the fact behaves with respect to the other elements of the fact; such behaviour can be shown by this sort of formula:-

$$\begin{array}{l} xRy \text{ is possible} \\ yRx \text{ is possible} \\ xRy.yRx \text{ is impossible} \end{array}$$

The relative behaviour of  $y$  and  $x$  is shown, by what in fact is the form of the atomic complex. That one object names another means that they can enter atomic combinations of the same form and that if 'A' and 'B' are names in the same complex, the things they name are of the same material sort, although the material sort of the names may not be that of the named. In this way nonsense is impossible.

Chapter Six.

Let us suppose that ' p ' is a picture-proposition; it says that p. This is a positive proposition; it asserts the existence of an atomic fact ( 421 ) and such a fact is a positive fact ( 206 ). The non-existence of such a fact is a negative fact ( 206 ) and this is what is asserted by the proposition which is the negative of ' p '. The negative of ' p ' is that proposition which is the characteristic of ' -p ', ' -- -p ' etc. ( 5253, 5512 ). When it is true that -p, ' -p ' agrees with reality ( 5512 ), but this does not make it a picture-proposition because logical constants do not represent ( 40312 ).

' p ' and ' -p ' have opposite senses ( 52341 ). The truth-conditions of the one are precisely the conditions which make the other false. It would not be possible to have either true without the other false. This does not simply mean, according to Wittgenstein, that p, if and only if  $\neg$ p. If you can say that p, you must also have at your disposal the means to say that -p. The existence of ' p ' as a proposition implies the existence of some proposition which says that -p ( 55151 ).

How does ' -p ' say that -p? It says it because of the operation of negation being applied to ' p '; this operation reverses the sense of ' p ', or rather, since

the sense of ' p ' does not change, it produces a proposition whose sense is the opposite of that of ' p '. How does it do this? It does it by correlating ' -p ', or some sign with a similar meaning, with the absence of the fact that p, relying on the correlation of ' p ' with the presence of the fact that p ( 55151 ). This seems to me to be a tacit recognition by Wittgenstein of an asymmetry in the meaningfulness of ' p ' and ' -p '. He recognises quite rightly that assertion is only possible by contrast with denial, that if it is in one's power to say that p, it is also in one's power to deny that p. Although he insists that any expression expressing that -p be constructed with the help of an expression which says that p, he is not willing to say that the latter be constructed with the help of the former. In fact his account of the picture-proposition implies that it is meaningful in its own right; having given meaning to the picture-propositions, you may then give meaning to all others.

Of course there is an asymmetry between ' p ' and ' -p '. Only one is a sense-function of the other; what I mean is this; if the expression ' p ' is nonsensical so is the expression ' -p ', but the expression ' -p ' may be nonsensical without the expression ' p ' being so, since the fault may lie with ' - '. So ' p ' must have a meaning if ' -p ' and ' - ' have, but ' p ' may have a meaning without ' -p ' having one.



On the other hand, you cannot have assertion without having denial. Wittgenstein realises this, but is guilty of an inconsistency in both making the meaningfulness of ' -p ' presuppose that of ' p ', but not vice versa, and the meaningfulness of ' p ' require that of ' -p '. The first comes from the negative proposition depending on the positive, but not vice versa; the second from assertion being impossible without denial.

I cannot myself see any necessary reason for the sort of correlation which Wittgenstein claims to exist between ' positive ' facts and propositions and ' negative ' facts and propositions. Assuming that we can recognise the absence of something without being able to say that this thing is absent, as a child, for instance, may realise that its mother is not there, why should we not introduce an expression for this, which we then use with some other expression to create a more complex expression by which to say that the formerly absent thing is now here? We might mean by ' Out ' that Mother was absent, and by ' Not out ' that Mother was here. We may have a device by which to create from sentence S1 some other sentence, S2, such that if both are used assertively, contradictory statements are made; but we cannot tell simply from the fact that S2 is a sense-function of S1 that S1 asserts existence or presence, rather than non-existence or absence.

Nor can I see any reason for either claiming that

' Out ' must be a linguistic complex of several words or for claiming that I must have a referential expression for Mother, if I mean that she is out when I say ' Out '. The information given by the expression does not require either of those conditions to be satisfied. Someone may understand exactly what I mean even if I cannot explain who is out. Of course they may not; they may want to ask me if I mean that Mother is out. This is beside the point, which is that they may know just what I mean even if I have no word for the person who is out.

It may be claimed that if I do not have the word, someone else does. It is surely possible, however, that I who do not have a referential expression for my mother, can not only mean that she is out when I say ' Out ' but can also understand that she is out when someone else says ' Out '.

Supposing, now, that I did have two referential expressions, and that these were the only simple expressions in my vocabulary. Could I do anything with them? A child very often does use just one such expression, e.g. ' Daddy '. It will say ' Daddy ' whenever, say, it first catches sight of its father after he has been unobservable for ten minutes. The child means nothing when it says ' Daddy ' and all that the word may mean to the child is that it expects to see its father when it hears the word and cannot see him. Suppose that the child also says ' Mummy ' when the mother is first sighted etc., and reacts to ' Mummy '

in the appropriate way. One might say that it is beginning to understand these words. It then adds to this understanding by saying the right word in response to the utterance 'Who is this?'. It now knows two names, though it never uses them referentially, since it never refers to the mother or father.

It is conceivable that a point be reached at which, by putting one of these words in some specific relation to the other, the child tells us that its mother is related in some way to its father; and that the child be told of this relation by putting the words in relation. To this extent the Picture Theory is right; it does describe a possible means of telling and being told. However, it is not because it sees or hears the 'sentence' as a likeness of what it then believes to be the case, that the child understands it; on the contrary, to see  $x$  as a likeness of  $y$  presupposes being able to say what  $x$  is a likeness of. Wittgenstein's answer might have been that, although the picture-proposition need not actually be seen as a 'picture' to be understood, it must always be possible to understand it as a picture. But then the question is, How do you understand it in the first instance.

One answer is that 'p' is simply a sign for the fact that  $p$  and '-p' a sign for the fact that not- $p$ , just in the way in which footsteps tell that someone is coming. This very simple account will not do, since

' -p ' would then tell both that p and that not-p. It might be suggested that the theory can be refined, in the following way:- Imagine a passage in, say, a hospital; at one end there are two lights which are sometimes both off or both on or on alternately. One light is red, the other blue. When the red light is on, it means that there is no one in the passage. When the blue light joins it, it means that there is someone in the passage. When no light is on, nothing can be learnt about whether there are people in the passage or not; the same with the blue light burning alone. This system gets over the previous objection. It makes the red light burning alone have a meaning, the blue light alone meaningless, both lights burning together meaningful, although the meaning of the red light has changed.

Of course, this sort of meaning is not linguistic meaning; but perhaps this ~~type~~ of account is suggestive in analysing negation, so far as its effect on informative power is concerned.

As Wittgenstein was later to say, simple models have their place. He said this in the realisation that the theory of language in the Tractatus is much too restrictive.

Consider its act-analysis. Let us say that such acts as promising, denying, stating etc. are complete, compared with such acts as referring to, or naming, or predicating. The only complete acts allowed in the theory are asserting, denying and inferring. The wealth of speech-acts given in



Lecture XI of Austin's How to do things with words cannot possibly be accounted for in the very limited scope of the Tractatus theory. To take only one sort given by Austin, the commissive i.e. the sort of act which commits 'the speaker to a certain course of action' (op.cit., p.156.). Examples are 'I promise', 'I mean to', 'I bet'. In promising to do something I am not making a statement; I am not asserting or denying or inferring.

But even at the level of the incomplete speech-act, the Tractatus account is too restrictive. We may refer to things, use the names of things which do not exist, but which have existed or are going to exist. The rigid insistence on the existence of the thing named is incompatible with our actual use of names. Furthermore, we may use names of things which are much more complex than the objects, e.g. ships, towns and planets.

Similarly, the semantic division into referential or logical is too narrow to admit such an expression as 'good' or 'promise' or 'into'; none of these is either referential or logical. None can be broken down into sets of names or logical operators or a mixture of these.

At the syntactic level, the categories are sentence, noun and conjunctive, leaving out of account the more esoteric logical symbols. Verbs, adjectives and prep-

ositions are abandoned. All these grammatical categories have in fact equal validity, and all are equally different. The attempt to boil them all down into nouns and conjunctives is futile; not only must a great deal be lost, but it is impossible to effect such a reduction. The English language has a certain grammatical structure which cannot be encompassed by the grammar of the Tractatus. This means that the Tractatus is incapable of explaining how English actually works. The Tractatus is not simply putting forward an alternative grammar; its analysis of picture-propositions in terms of forms and names is meant to show the grammar of a type of proposition through which all meaning passes. Language is somehow built up out of these propositions. This will simply give us conjunctions of propositions of those forms, and no amount of conjunctions of nouns, conjunctives and sentences of nouns and conjunctives will produce the categories of verb or preposition; just as, no matter how many names you put together, you will not get an expression like ' I promise '.

What is wrong with ' John loves Jean ', according to the Tractatus? Nothing. The theory does not claim that sentences not of the atomic form are in some way mal-shaped. What it claims is that the actual structure of the proposition is not evident. Its real form is hidden.

' It was Russell who performed the service of showing that the apparent logical form of a proposition need not be its real one.'

This quotation ( 40031 ) surely refers to Russell's work on ' the '. What is the ' real ' form of ' John loves Jean '? Following Russell's model, it would be that expression whose non-logical elements correspond to real things no matter what the state of the world, unless they name particulars. For some reason, Wittgenstein rejects Russell's particulars and goes back to Moore's concepts; so this means that ' John ' and ' Jean ' are not really names, but complex propositions. But ' John ' is the name of this person; it does not matter that he changes, that he is complex. When we use the word ' John ' we mean this person and no other; we refer to him as ' John '; ' John ' is a name.

Must we ' get rid ' of ' loves '? Must we express a relation by a relation? We can express relations, even name them, without simply relying on relations; since it is logically possible for us to do this, there is nothing logically wrong in it. There is nothing which prevents us from saying that John loves Jean by using a word for that sort of relationship; this is how we describe such relationships, not simply by putting the names of the objects in some relation, but by introducing verbs and other types of word which, although particulars or things, can be correlated with relations.

It might be psychologically advantageous not to name relations, not to have expressions corresponding to them, but it is logically permissible.

If Wittgenstein's claim is that there is an atomic level at which language operates, at which grammar and logic are one, a level at which everything is open to view, let him tell us how to get there. Let him show us atomic facts and atomic propositions; let him take a sentence from some natural language and replace it gradually by sentences whose apparent grammar is their real one. It is not enough to point to a 'discrepancy' between ordinary language and atomic language, giving an abstract description of the latter. We want to know what is 'misleading' about ordinary language, not in terms of some theory which has no foundation in fact, but in terms of actual breakdown of function. 'The king of France is bald' misled Russell only because he thought that every referring expression had to be usable at any given time; he could not accept that it might be used at sometimes and not at others; it was not misleading in any genuine sense at all. Russell had a theory of meaning; because language did not fit it he blamed language!

Wittgenstein's theory cannot be easily connected with ordinary language, because he does not offer an adequate means of passing from ordinary to atomic language; his theory is to a great extent incomprehensible, because we do not know, except in a very abstract way, what he means. We cannot relate his theory with convenience to our language and world. So far as we can understand it, it is not an explanation of meaning, i.e. it is false.



Fundamentally, the Picture Theory of language is a correspondence theory of meaning, a continuation of a theory which occupied Russell in, and shortly after, the first decade of this century. The doctrine of form and names seems to me essentially Russellian. The metaphysics, on the other hand, smacks of Moore. But the combination of these is Wittgenstein's own, with certain important additions, e.g. that the elements of the proposition and the fact are not the same, his general theory of truth-functions, his suggestion that Russell's theory of types is both unnecessary and nonsensical.

The immediate problem answered by the theory is, What is the identity of proposition and reality, given (a) that there may be no observable similarity and (b) that propositions are sometimes false? ( In this connection, I must mention Favrholt's claim that,

' From the start, Wittgenstein exempts himself from giving any explanation of how an elementary proposition can be false and yet have a sense. I am not the first to notice this difficulty. It has been observed by both Anscombe ( vide An Introduction, Chap.4 ), Stenius ( vide Wittgenstein's Tractatus, p.40 ) and Maslow ( vide A Study, pp75ff ).'

An Interpretation, p.46.

This is a grotesque travesty of the Picture Theory, and of its interpretation at least by Stenius and Maslow; Maslow, for instance, says on p.81 that ' the sense of the proposition is independent of the actual state of

affairs, of the existence of the fact it describes.')

In terms of its assumptions, the theory does explain how there can be identity; but its assumptions about the atomic nature of reality and language are wrong.

### Summary.

1. Wittgenstein, in his discussion of the relation between the positive and the negative propositions, makes the meaningfulness of the latter depend on that of the former, but not vice versa. In his discussion of denial and assertion, admitting or realising that neither is possible without the other, / makes the meaningfulness of the negative a condition of that of the positive and vice versa. His account is thus inconsistent. /

2. There is no reason for every language system

(a) to have positive propositions correlated with  
' positive ' facts

(b) to have complex sentences

(c) to use names.

3. The account given of a type of language, atomic language, to which all language must be reducible, is wrong because it is far too simple. The semantic, syntactic and act categories of ordinary language are not reducible to compounds of the categories of his atomic language.

4. Since we can make statements by using words for relations and by using names for complexes, there is nothing logically wrong with this. There is thus no need to believe in an atomic language of the sort described.

5. Wittgenstein's Picture Theory does not explain language, and is in fact at odds with it. The theory is the rigorous working out of theories held by Moore and Russell. It succeeds in solving the problem of the similarity of language and reality, but only at the expense of distorting both language and reality.

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